

**U.S. ARMY CORPS OF ENGINEERS  
CIVIL WORKS PROGRAM**

**CONGRESSIONAL SUBMISSION  
FISCAL YEAR 2002**

**SOUTH ATLANTIC DIVISION**

**Budgetary information will not be released  
Outside the Department of the Army until  
3 April 2001**

Justification of Estimates for Civil Function Activities  
Department of the Army, Fiscal Year 2002  
SOUTH ATLANTIC DIVISION

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Justification of Estimates for Civil Function Activities  
Department of the Army, Corps of Engineers  
Fiscal Year 2001

SUMMARY SOUTH ATLANTIC DIVISION

|                                           | FY 2001<br><u>Allocation</u> | FY 2002<br><u>Request</u> | Increase<br>or<br><u>Decrease</u> |
|-------------------------------------------|------------------------------|---------------------------|-----------------------------------|
| <u>General Investigations</u>             |                              |                           |                                   |
| Surveys                                   | \$ 6,449,000                 | \$ 6,725,000              | \$ +276,000                       |
| Preconstruction Engineering and Design    | 742,000                      | 1,275,000                 | +533,000                          |
| Subtotal General Investigations           | (7,191,000)                  | (8,000,000)               | (+809,000)                        |
| <u>Construction, General</u>              |                              |                           |                                   |
| Construction                              | 277,127,000                  | 256,775,000               | -20,352,000                       |
| Major Rehabilitation                      | 17,979,000                   | 38,425,000                | +20,446,000                       |
| Dam Safety Assurance                      | 0                            | 2,500,000                 | +2,500,000                        |
| Subtotal Construction, General            | (295,106,000)                | (297,700,000)             | (+2,594,000)                      |
| <u>Operation and Maintenance, General</u> |                              |                           |                                   |
| Project Operation                         | 89,326,000                   | 92,024,000                | +2,698,000                        |
| Project Maintenance                       | 227,019,000                  | 197,933,000               | -29,086,000                       |
| Subtotal Operation and Maintenance        | (316,345,000)                | (289,957,000)             | (-26,388,000)                     |
| GRAND TOTAL, SOUTH ATLANTIC DIVISION      | <u>\$ 618,642,000</u>        | <u>\$ 595,657,000</u>     | <u>\$ -22,985,000</u>             |

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Division: South Atlantic

| Study/Project                                                  | Total<br>Estimated<br>Federal Cost<br>\$ | Allocation<br>Prior to<br>FY 2001<br>\$ | Allocation<br>FY 2001<br>\$ | Tentative<br>Allocation<br>FY 2002<br>\$ | Additional<br>to Complete<br>After FY 2002<br>\$ |
|----------------------------------------------------------------|------------------------------------------|-----------------------------------------|-----------------------------|------------------------------------------|--------------------------------------------------|
| 1. SURVEYS – CONTINUING                                        |                                          |                                         |                             |                                          |                                                  |
| a. Navigation Studies                                          |                                          |                                         |                             |                                          |                                                  |
| Alabama                                                        |                                          |                                         |                             |                                          |                                                  |
| Alabama River below Claiborne<br>Lock & Dam<br>Mobile District | 2,617,000                                | 740,000                                 | 150,000                     | 300,000                                  | 1,427,000                                        |

The Alabama-Coosa-Tallapoosa (ACT) Rivers Basin drains an area of 22,800 square miles in Georgia and Alabama. There is an existing authorized 9 foot by 200 foot navigation channel on the Alabama River from its junction with the Mobile River 289 miles to Montgomery, Alabama, including three locks and dams. Waterway users have reported experiencing frequent problems in safely navigating the lower 72 miles of this waterway, downstream of the Claiborne Lock and Dam. The 9-foot navigation channel availability is restricted to approximately 60% of time due to recurring shoaling and streambed degradation following high flow periods. In response to these reported problems, Congress authorized a reconnaissance investigation to determine if a feasibility study of an additional lock and dam located in this reach of the waterway would be in the interest of the Federal government. The reconnaissance investigation found a lack of economic justification for an additional lock and dam on the Alabama River downstream of the Claiborne Lock and Dam. However, data developed for the ACF/ACT Comprehensive Study indicates that the potential for economic justification for other less costly measures in this area is very high, and potential adverse environmental impacts would be minimal. Additionally, the May 1997 Initial Appraisal for Navigation Improvements on the Lower Alabama River concluded that there is a strong potential for at least one economically feasible and environmentally sensitive alternative for improving navigation, and that construction of additional training works would improve navigation while enhancing the riverine environment. Further, it recommended a feasibility study of measures to improve the reliability of the navigation channel in the Alabama River below Claiborne Lock and Dam. Since this is an inland navigation study, no cost sharing will be required for the feasibility study.

Fiscal Year 2001 funds are being used to continue the feasibility phase, including engineering, environmental, and economic investigations.

Funds requested for Fiscal Year 2002 will be used to continue feasibility phase investigations.

The reconnaissance phase was completed in September 1996. The feasibility phase completion date is to be determined.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Division: South Atlantic

| Study/Project                     | Total<br>Estimated<br>Federal Cost<br>\$ | Allocation<br>Prior to<br>FY 2001<br>\$ | Allocation<br>FY 2001<br>\$ | Tentative<br>Allocation<br>FY 2002<br>\$ | Additional<br>to Complete<br>After FY 2002<br>\$ |
|-----------------------------------|------------------------------------------|-----------------------------------------|-----------------------------|------------------------------------------|--------------------------------------------------|
| Bayou La Batre<br>Mobile District | 600,000                                  | 84,000                                  | 16,000                      | 50,000                                   | 450,000                                          |

Bayou La Batre is located on the Mississippi Sound about 30 miles southwest of Mobile, Alabama. There is an existing project which provides for an 18-foot by 120-foot channel from the Pascagoula Ship channel through Mississippi Sound to the mouth of Bayou La Batre, a total distance of about 20 miles. It then provides for an 18-foot by 100-foot channel to the Alabama Highway 188 bridge, a distance of about 2.5 miles. Shippers in Bayou La Batre wish to expand business into Mexico and the Caribbean region, and a shorter route to the Gulf of Mexico would enhance such opportunities. The study will determine the feasibility of an alternate, more efficient navigational access from the mouth of the bayou to the Gulf of Mexico, thereby reducing the existing/future transportation costs of import/export commodities, including seafood and textiles. The Alabama State Docks is the potential sponsor and understands the requirements for study cost sharing. The Feasibility Cost Sharing Agreement is scheduled to be signed in December 2001.

Fiscal Year 2001 funds are being used to negotiate a Feasibility Cost Sharing Agreement. FY 2002 funds will be used to complete the Recon phase and continue into the feasibility phase. The preliminary estimated cost of the feasibility phase is \$1,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

|                                 |              |
|---------------------------------|--------------|
| Total Estimated Study Cost      | \$ 1,100,000 |
| Reconnaissance Phase (Federal)  | 100,000      |
| Feasibility Phase (Federal)     | 500,000      |
| Feasibility Phase (Non-Federal) | 500,000      |

The reconnaissance phase is scheduled for completion in December 2001. The feasibility phase completion date is to be determined.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Division: South Atlantic

| Study/Project                                          | Total<br>Estimated<br>Federal Cost<br>\$ | Allocation<br>Prior to<br>FY 2001<br>\$ | Allocation<br>FY 2001<br>\$ | Tentative<br>Allocation<br>FY 2002<br>\$ | Additional<br>to Complete<br>After FY 2002<br>\$ |
|--------------------------------------------------------|------------------------------------------|-----------------------------------------|-----------------------------|------------------------------------------|--------------------------------------------------|
| Black Warrior-Tombigbee<br>Waterway<br>Mobile District | 15,030,000                               | 451,000                                 | 191,000                     | 300,000                                  | 14,088,000                                       |

The Black Warrior-Tombigbee (BWT) Waterway is part of the inland waterway system and lies within the State of Alabama. The authorized project provides essentially for a channel 9 feet deep and 200 feet wide from the industrial center of Birmingham, Alabama, to the deep water Port of Mobile. A total lift of 255 feet is provided by 6 locks and dams. Raw materials are transported to the Birmingham area and raw materials and finished products are transported to the Port of Mobile for export. Traffic on the BWT, which continues to increase, amounted to 24.7 million tons in 1995. Navigation interests desire a study of navigation problems on the BWT to determine what improvements may be warranted. Problems to be investigated include delays at constrictive bends and bridges and at heavily used locks at Demopolis and Coffeeville. As traffic on the system continues to increase, delays will increase, resulting in greater negative economic impacts to waterway shippers. The feasibility study will be conducted in three phases. The first phase will identify and assess the magnitude and timing of navigation problems and needs. That phase will provide the basis for timing of future improvements. The second phase will formulate and evaluate various alternatives to meet the needs identified in the first phase. The third phase will focus on the engineering and design of those plans recommended in the second phase of the feasibility study, including preparation of an Engineering Appendix. Since this is an inland navigation study, no cost sharing will be required for the feasibility study.

Fiscal Year 2001 funds are being used to continue the feasibility phase of the study, including review of the needs assessment by the Inland Waterway Users Board and the Warrior-Tombigbee Waterway Association, thereby completing phase one, and initiation of Phase II engineering and environmental investigations.

Fiscal Year 2002 funds will be used to continue the feasibility phase, including engineering, environmental, and economic investigations.

The reconnaissance study was completed in December 1998. The feasibility phase completion date is to be determined.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Division: South Atlantic

| Study/Project                | Total<br>Estimated<br>Federal Cost<br>\$ | Allocation<br>Prior to<br>FY 2001<br>\$ | Allocation<br>FY 2001<br>\$ | Tentative<br>Allocation<br>FY 2002<br>\$ | Additional<br>to Complete<br>After FY 2002<br>\$ |
|------------------------------|------------------------------------------|-----------------------------------------|-----------------------------|------------------------------------------|--------------------------------------------------|
| Dog River<br>Mobile District | 1,651,000                                | 919,000                                 | 187,000                     | 250,000                                  | 295,000                                          |

The study area, located in Mobile County, Alabama, is a tidally influenced stream approximately 8 miles in length that discharges into the western side of Mobile Bay, south of the City of Mobile. There is an existing authority for the Corps of Engineers to maintain the Dog River navigation project from Mobile Harbor Ship Channel to 2,600 feet west of the Alabama Highway 163 Bridge. The river has severe siltation west of that point and is not navigable during low tide. There is an urgent need to identify navigation and siltation problems and potential solutions for the portion of the river west of the existing channel. Numerous streams drain into Dog River with varying degrees of sedimentation transfer due to differing land use patterns. The reconnaissance study investigated potential alternatives that would improve navigation and water quality and provide environmental restoration. The feasibility study will include engineering, economic, and environmental investigations to address flood and recreational navigation problems and identify and evaluate potential alternatives to improve these conditions. The City of Mobile is the sponsor and understands the requirements for study cost sharing. The Feasibility Cost Sharing Agreement was signed in May 1999.

Fiscal Year 2001 funds are being used to continue the feasibility phase of the study. The funds requested for fiscal year 2002 will be used to continue the feasibility phase of the study. The estimated cost of the feasibility phase is \$2,762,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study costs sharing is as follows:

|                                 |             |
|---------------------------------|-------------|
| Total Estimated Study Cost      | \$3,032,000 |
| Reconnaissance Phase (Federal)  | 270,000     |
| Feasibility Phase (Federal)     | 1,381,000   |
| Feasibility Phase (Non-Federal) | 1,381,000   |

The reconnaissance phase was completed in May 1999. The feasibility phase completion date is to be determined.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Division: South Atlantic

| Study/Project                             | Total<br>Estimated<br>Federal Cost<br>\$ | Allocation<br>Prior to<br>FY 2001<br>\$ | Allocation<br>FY 2001<br>\$ | Tentative<br>Allocation<br>FY 2002<br>\$ | Additional<br>to Complete<br>After FY 2002<br>\$ |
|-------------------------------------------|------------------------------------------|-----------------------------------------|-----------------------------|------------------------------------------|--------------------------------------------------|
| Florida                                   |                                          |                                         |                             |                                          |                                                  |
| Lake Worth Inlet<br>Jacksonville District | 600,000                                  | 86,000                                  | 60,000                      | 100,000                                  | 354,000                                          |

Lake Worth Inlet is located in Palm Beach County on the lower east coast of Florida. The existing Federal project includes an entrance channel 400 feet wide and 35 feet deep leading to an interior channel 300 feet wide and 33 feet deep. The turning basin is 1,400 by 1,210 feet and 33 feet deep. A northern extension to the turning basin is maintenance at 25 feet. The study effort will focus on deepening and widening the existing Federal project at Lake Worth Inlet. The inlet and turning basin serve Palm Beach Harbor. The last deepening to the entrance channel and turning basin was completed in 1967. A study by the U.S. Coast Guard in 1997 recommended widening the interior channel to 400 feet. Federal assistance was then requested through a House Resolution dated in 1998. The Port of Palm Beach is the non-Federal sponsor and understands the requirements for study cost sharing. The study was authorized by Resolution adopted March 11, 1998, by the Committee on Transportation and Infrastructure of the United States House of Representatives.

FY 2001 funds will be used to complete reconnaissance phase and initiate feasibility phase. FY 2002 funds will be used to continue feasibility phase. The preliminary estimated cost of the feasibility phase is \$1,000,000, which is to be cost shared on a 50-50 percent basis Federal and non-Federal interests. A summary of study cost sharing is as follows:

|                                 |             |
|---------------------------------|-------------|
| Total Estimated Study Cost      | \$1,100,000 |
| Reconnaissance Phase (Federal)  | 100,000     |
| Feasibility Phase (Federal)     | 500,000     |
| Feasibility Phase (Non-Federal) | 500,000     |

The reconnaissance phase is scheduled for completion in May 2001. The feasibility phase completion date is being determined.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Division: South Atlantic

| Study/Project                      | Total<br>Estimated<br>Federal Cost<br>\$ | Allocation<br>Prior to<br>FY 2001<br>\$ | Allocation<br>FY 2001<br>\$ | Tentative<br>Allocation<br>FY 2002<br>\$ | Additional<br>to Complete<br>After FY 2002<br>\$ |
|------------------------------------|------------------------------------------|-----------------------------------------|-----------------------------|------------------------------------------|--------------------------------------------------|
| b. Flood Damage Prevention Studies |                                          |                                         |                             |                                          |                                                  |
| Alabama                            |                                          |                                         |                             |                                          |                                                  |
| Baldwin County Watersheds          | 750,000                                  | 84,000                                  | 150,000                     | 50,000                                   | 466,000                                          |
| Mobile District                    |                                          |                                         |                             |                                          |                                                  |

Baldwin County is located in southwestern Alabama, about 20 miles east of Mobile, Alabama. The Baldwin County Commission has requested that the Corps of Engineers conduct six separate studies within the county at Fish River, Lake Forest, Styx River, Magnolia Springs, Wolf Bay, and Weeks Bay. Baldwin County has a long history of severe water resources problems. Major flood events occurred in July 1997 as a result of Hurricane Danny and September 1998 as a result of Hurricane Georges. Recent flooding has caused extensive damages to residential and business areas. There is an urgent need to examine flooding and environmental problems in Foley along Wolf Bay, in Foley along Weeks Bay, in Daphne at Lake Forest, and along the headwaters of Styx River. The study will include investigation of alternatives to restore the ecosystem, improve water quality, and reduce erosion and flooding. Fish River Watershed and Magnolia Springs have been studied, but the sponsor is not interested in continuing into the feasibility phase on those portions of the study. The Baldwin County Commission is the potential non-Federal sponsor and understands the requirements for cost sharing. The Feasibility Cost Sharing Agreement is scheduled to be signed in September 2001.

Fiscal Year 2000 funds carried into FY 2001 are being used to complete the reconnaissance phase at full Federal expense. If the reconnaissance report is certified to be in accord with policy, Fiscal Year 2002 funds will be used to continue the feasibility phase. The preliminary estimated cost of the feasibility phase is \$1,300,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

|                                 |             |
|---------------------------------|-------------|
| Total Estimated Study Cost      | \$1,400,000 |
| Reconnaissance Phase (Federal)  | 100,000     |
| Feasibility Phase (Federal)     | 650,000     |
| Feasibility Phase (Non-Federal) | 650,000     |

The reconnaissance phase is scheduled for completion in September 2001. The feasibility phase completion date is to be determined.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Division: South Atlantic

| Study/Project                               | Total<br>Estimated<br>Federal Cost<br>\$ | Allocation<br>Prior to<br>FY 2001<br>\$ | Allocation<br>FY 2001<br>\$ | Tentative<br>Allocation<br>FY 2002<br>\$ | Additional<br>to Complete<br>After FY 2002<br>\$ |
|---------------------------------------------|------------------------------------------|-----------------------------------------|-----------------------------|------------------------------------------|--------------------------------------------------|
| Brewton and East Brewton<br>Mobile District | 750,000                                  | 84,000                                  | 16,000                      | 50,000                                   | 600,000                                          |

The study area is in Escambia County in the south central part of the state of Alabama. It is a part of the Escambia-Conecuh River Basin. Because of rapid growth in the area, considerable development has occurred. This commercial, industrial, and residential expansion in and adjacent to the flood plains in the Brewton and East Brewton area has resulted in recent widespread flood problems. The March 1998 flood and the September 1998 Hurricane Georges flood resulted in extensive loss of property including water lines, roads and bridges, wastewater systems, residences and automobiles. Recent discussions with Escambia County officials indicate an urgent need to conduct a study of the area, focusing on identifying flood damage problems. The study will include investigations of alternatives to reduce flooding along Burnt Corn and Murder Creeks. Escambia County has indicated their intent to cost share in the feasibility study. They are familiar with cost sharing requirements. The Feasibility Cost Sharing Agreement is scheduled to be executed in September 2001.

Fiscal Year 2001 funds are being used to complete the reconnaissance phase at full Federal expense. If the reconnaissance report is certified to be in accord with policy, Fiscal Year 2002 funds will be used to continue into the feasibility study. The preliminary estimated cost of the feasibility phase is \$1,300,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

|                                 |             |
|---------------------------------|-------------|
| Total Estimated Study Cost      | \$1,400,000 |
| Reconnaissance Phase (Federal)  | 100,000     |
| Feasibility Phase (Federal)     | 650,000     |
| Feasibility Phase (Non-Federal) | 650,000     |

The reconnaissance phase is scheduled for completion in September 2001. The feasibility phase completion date is to be determined.



APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Division: South Atlantic

| Study/Project                           | Total<br>Estimated<br>Federal Cost<br>\$ | Allocation<br>Prior to<br>FY 2001<br>\$ | Allocation<br>FY 2001<br>\$ | Tentative<br>Allocation<br>FY 2002<br>\$ | Additional<br>to Complete<br>After FY 2002<br>\$ |
|-----------------------------------------|------------------------------------------|-----------------------------------------|-----------------------------|------------------------------------------|--------------------------------------------------|
| Lubbub Creek, Reform<br>Mobile District | 600,000                                  | 86,000                                  | 14,000                      | 50,000                                   | 450,000                                          |

The study area is located along Lubbub Creek near Reform, Alabama in Pickens County in west central Alabama. The Corps was first alerted of extensive flooding problems in 1997. There exists persistent inundation of streets at several residences, along with recent impacts to the wastewater treatment facility discharge in the City of Reform. Large increases in siltation are evident due in part to recent extensive timber clearcutting practices in the once heavily forested terrain. The study will identify potential alternatives to alleviate flood damage in Reform, and to restore the environment and aquatic habitat in the Lubbub Creek Watershed. The City of Reform, Alabama has indicated their intent to cost share in the feasibility study and is familiar with cost sharing requirements. The Feasibility Cost Sharing Agreement is scheduled to be executed in August 2001.

Fiscal Year 2001 funds are being used to complete the reconnaissance phase at full Federal expense. If the reconnaissance report is certified to be in accord with policy, funds requested for FY 2002 will be used to continue into the feasibility phase. The preliminary estimated cost of the feasibility phase is \$1,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

|                                 |             |
|---------------------------------|-------------|
| Total Estimated Study Cost      | \$1,100,000 |
| Reconnaissance Phase (Federal)  | 100,000     |
| Feasibility Phase (Federal)     | 500,000     |
| Feasibility Phase (Non-Federal) | 500,000     |

The reconnaissance phase is scheduled for completion in August 2001. The feasibility phase completion date is to be determined.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Division: South Atlantic

| Study/Project                         | Total<br>Estimated<br>Federal Cost<br>\$ | Allocation<br>Prior to<br>FY 2001<br>\$ | Allocation<br>FY 2001<br>\$ | Tentative<br>Allocation<br>FY 2002<br>\$ | Additional<br>to Complete<br>After FY 2002<br>\$ |
|---------------------------------------|------------------------------------------|-----------------------------------------|-----------------------------|------------------------------------------|--------------------------------------------------|
| Florida                               |                                          |                                         |                             |                                          |                                                  |
| Biscayne Bay<br>Jacksonville District | 3,420,000                                | 953,000                                 | 407,000                     | 240,000                                  | 1,820,000                                        |

The project area is located along the southeastern coast of Florida, including most of Biscayne National Park and adjacent lands, which provide fresh surface or groundwater to Biscayne Bay. Biscayne Bay and its unique environment contributes to the economic health of the area due to its relation to tourism, commercial and recreation fishing, and general recreation. This study proposes to develop a modeling system for Biscayne Bay as a first step to investigate the effects of the Federal projects on water circulation, biological communities, and water quality in the bay. Especially of interest are the impacts caused by canals built as part of the Central and Southern Florida (C&SF) project. These canals are believed to have changed the timing, distribution and amount of freshwater reaching the bay, impacting the natural salinity patterns and ecology. Phase 1 studies involve data collection and creation of a hydrodynamic and salinity model of the bay. Phase 2 involves development of a water quality nutrients model and Phase 3 addresses the creation of a biological model, including plant and animal communities. The proposed models would allow resource managers to assess those impacts and determine if further studies of Biscayne Bay are needed. Miami-Dade County is the local sponsor and the Feasibility Cost Sharing Agreement was executed October 1995.

Fiscal Year 2001 funds will be used to complete Phase 1 and initiate Phase 2. The funds requested for Fiscal Year 2002 will be used to continue Phase 2. The estimated cost of the feasibility phase is \$5,900,000, which is to be shared 50-50 by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

|                                 |             |
|---------------------------------|-------------|
| Total Estimated Study Cost      | \$6,370,000 |
| Reconnaissance Phase (Federal)  | 470,000     |
| Feasibility Phase (Federal)     | 2,950,000   |
| Feasibility Phase (Non-Federal) | 2,950,000   |

The reconnaissance phase was completed September 1995. Feasibility phase completion date is being determined.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Division: South Atlantic

| Study/Project                                     | Total<br>Estimated<br>Federal Cost<br>\$ | Allocation<br>Prior to<br>FY 2001<br>\$ | Allocation<br>FY 2001<br>\$ | Tentative<br>Allocation<br>FY 2002<br>\$ | Additional<br>to Complete<br>After FY 2002<br>\$ |
|---------------------------------------------------|------------------------------------------|-----------------------------------------|-----------------------------|------------------------------------------|--------------------------------------------------|
| Hillsborough River Basin<br>Jacksonville District | 1,443,000                                | 100,000                                 | 85,000                      | 300,000                                  | 958,000                                          |

The Hillsborough River has its headwaters in the Green Swamp and drains approximately 690 square miles. The river flows in a southwesterly direction through Temple Terrace, Sulphur Springs and the center of downtown Tampa into Tampa Bay. The counties within Hillsborough River Basin are Hernando County, Pasco County, and Hillsborough County. According to the U.S. Census Bureau, the population increase from 1985 to 1997 within the river basin was 26 percent. Continued residential development in the Tampa area has led to increasing demands for better flood control as a growing concern over environmental protection and restoration. Development pressures have significantly changed the physical, biological, demographic, and economic conditions in the area. The reconnaissance study will determine the need for comprehensive watershed planning to address flood control, environmental restoration and protection, aquifer storage and retrieval, and other water resource related problems. The Southwest Florida Water Management District (SWFWMD) is the potential non-Federal sponsor and understands the requirements for study cost sharing. The study was authorized by Resolution adopted March 11, 1998, by the Committee on Transportation and Infrastructure of the United States House of Representatives.

FY 2001 funds will be used to complete reconnaissance phase and initiate feasibility phase. FY 2002 funds will be used to continue feasibility phase. The preliminary estimated cost of the feasibility phase is \$2,686,000, which is to be cost shared on a 50-50 percent basis Federal and non-Federal interests. A summary of study cost sharing is as follows:

|                                 |             |
|---------------------------------|-------------|
| Total Estimated Study Cost      | \$2,786,000 |
| Reconnaissance Phase (Federal)  | 100,000     |
| Feasibility Phase (Federal)     | 1,343,000   |
| Feasibility Phase (Non-Federal) | 1,343,000   |

The reconnaissance phase is scheduled for completion in May 2001. The feasibility phase completion date is being determined.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Division: South Atlantic

| Study/Project                                               | Total<br>Estimated<br>Federal Cost<br>\$ | Allocation<br>Prior to<br>FY 2001<br>\$ | Allocation<br>FY 2001<br>\$ | Tentative<br>Allocation<br>FY 2002<br>\$ | Additional<br>to Complete<br>After FY 2002<br>\$ |
|-------------------------------------------------------------|------------------------------------------|-----------------------------------------|-----------------------------|------------------------------------------|--------------------------------------------------|
| Withlacoochee River Basin, Florida<br>Jacksonville District | 1,565,000                                | 100,000                                 | 85,000                      | 300,000                                  | 1,080,000                                        |

The Withlacoochee River has its headwaters in the Green Swamp and drains approximately 2,000 square miles within a corridor 30 miles wide and 90 miles long. It flows in a northwesterly direction for some 157 miles to the Gulf of Mexico at Yankeetown. The counties within the Withlacoochee River Basin are Citrus County, Hernando County, Lake County, Levy County, Marion County, Pasco County, Polk County, and Sumter County. According the U.S. Census Bureau, the population increase from 1985 to 1997 within the river basin was 39 percent. The headwaters of the basin are largely undeveloped and are an asset unique to the region. Downstream of the headwaters region, the river flows through a rapidly growing population area near Inverness, located in central Florida. Continued residential development in this area has led to increasing public demands for better flood control and water supply, as well as growing concern over environmental protection and restoration. Since 1990 public interests in the watershed management has grown rapidly. The reconnaissance study will determine the need for comprehensive watershed planning to address flood control, environmental restoration and protection, aquifer storage and retrieval, and other water resource related problems. The Southwest Florida Water Management District (SWFWMD) is the potential Non-Federal sponsor and understands the requirements for study cost sharing. The study was authorized by Resolution adopted March 11, 1998, by the Committee on Transportation and Infrastructure of the United States House of Representatives.

FY 2001 funds will be used to complete reconnaissance phase and initiate feasibility phase. FY 2002 funds will be used to continue feasibility phase. The preliminary estimated cost of the feasibility phase is \$2,930,000, which is to be cost shared on a 50-50 percent basis Federal and non-Federal interests. A summary of study cost sharing is as follows:

|                                 |             |
|---------------------------------|-------------|
| Total Estimated Study Cost      | \$3,030,000 |
| Reconnaissance Phase (Federal)  | 100,000     |
| Feasibility Phase (Federal)     | 1,465,000   |
| Feasibility Phase (Non-Federal) | 1,465,000   |

The reconnaissance phase is scheduled for completion in May 2001. The feasibility phase completion date is being determined.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Division: South Atlantic

| Study/Project                | Total<br>Estimated<br>Federal Cost<br>\$ | Allocation<br>Prior to<br>FY 2001<br>\$ | Allocation<br>FY 2001<br>\$ | Tentative<br>Allocation<br>FY 2002<br>\$ | Additional<br>to Complete<br>After FY 2002<br>\$ |
|------------------------------|------------------------------------------|-----------------------------------------|-----------------------------|------------------------------------------|--------------------------------------------------|
| Georgia                      |                                          |                                         |                             |                                          |                                                  |
| Augusta<br>Savannah District | 1,700,000                                | 418,000                                 | 375,000                     | 252,000                                  | 655,000                                          |

The study area is Richmond County and areas contiguous to it. Richmond County is located in the northeastern part of the state of Georgia and comprises an area of approximately 326 square miles. It is located on the West Side of the Savannah River and is part of the Savannah River Basin that comprises about 11,000 square miles. The economy of the study area is highly diversified, including industry, agriculture, and maritime. It is the trade center for 13 counties in Georgia and 5 counties in South Carolina. The growth of the city of Augusta has been reflected by a corresponding growth in the unincorporated areas of Richmond County. Because of the rapid growth of the unincorporated areas, considerable development has occurred in the flood plains of the streams in the study area. This commercial, industrial, and residential expansion in and adjacent to the flood plains in the Richmond County area has resulted in recent widespread flood problems occurring in many parts of the county. The 12 October 1990 flood resulted in the loss of four lives and thousands of people were left homeless. Damage estimates, including damages to water lines, roads and bridges, wastewater systems, a hospital, the Augusta National Golf Course, residences and automobiles, exceeded \$47 million. The reconnaissance study conducted in Fiscal Years 1998 and 1999, was focused on flooding of public property and residential areas. It included reviews of previous assessments, development a preliminary array of alternatives and conducting economic, engineering and environmental analyses to determine which areas warrant further study. The study identified several flood control alternatives that are concentrated in four water basins in Richmond County. These alternatives have been identified with Rae's Creek, Rocky Creek, Phinizy Swamp Basin (and associated drainages), and the Augusta Canal. The Feasibility Cost Sharing Agreement with the local sponsor, Augusta - Richmond County, was executed in November 1999.

Fiscal Year 2001 funds are being used to continue the feasibility phase of the study. The funds requested for Fiscal Year 2002 will be used to complete the feasibility phase. The estimated cost of the feasibility phase is \$3,200,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

|                                 |             |
|---------------------------------|-------------|
| Total Estimated Study Cost      | \$3,300,000 |
| Reconnaissance Phase (Federal)  | 100,000     |
| Feasibility Phase (Federal)     | 1,600,000   |
| Feasibility Phase (Non-Federal) | 1,600,000   |

The reconnaissance phase was completed in November 1999. The feasibility study completion date is being determined

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Division: South Atlantic

| Study/Project                            | Total<br>Estimated<br>Federal Cost<br>\$ | Allocation<br>Prior to<br>FY 2001<br>\$ | Allocation<br>FY 2001<br>\$ | Tentative<br>Allocation<br>FY 2002<br>\$ | Additional<br>to Complete<br>After FY 2002<br>\$ |
|------------------------------------------|------------------------------------------|-----------------------------------------|-----------------------------|------------------------------------------|--------------------------------------------------|
| Neuse River Basin<br>Wilmington District | 1,100,000                                | 84,000                                  | 75,000                      | 100,000                                  | 841,000                                          |

The study area is located in the eastern part of North Carolina. The Neuse River basin amounts to about 11 percent of the entire State of North Carolina and consists of all or portions of 16 counties. The basin is roughly oblong in shape, approximately 180 miles long, with a maximum width of about 46 miles. The Neuse River is formed by the confluence of the Eno and Flat Rivers, about 8 miles north of the city of Durham, and has a drainage area of approximately 5,710 square miles. The basin is primarily an agricultural region, but contains many small towns and several cities which are important commercial centers. Considerable flooding occurred during and after Hurricane Fran below Smithfield where the flood plain is broad and flat. The city of Kinston suffered the most flooding damages. Estimated flood damages from Hurricane Fran below Falls Lake amounted to \$17,300,000 at September 1996 price levels and October 1993 levels of development. The estimated damages would have been \$275,700,000 without Falls Lake in operation. This entire area suffered significant damages as a result of Hurricane Floyd in 1999. Total flood damages are not yet available; however, the amount of State and Federal disaster assistance through April 2000 was in excess of \$297,000,000. There has also been considerable water quality problems due to high levels of nutrients, particularly nitrogen. This has resulted in severe impacts to fisheries. The Feasibility study will include a comprehensive plan to address measures to improve flood control, water quality, environmental protection and restoration and related purposes. The potential sponsor for the feasibility study is the State of North Carolina. The Feasibility Cost Sharing Agreement is scheduled to be signed in May 2001.

Fiscal Year 2001 funds will be used to initiate the feasibility phase of the study. Fiscal Year 2002 funds will be used to continue the feasibility phase of the study including collection of baseline data and problem identification. The preliminary estimated cost of the feasibility phase is \$2,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

|                                 |             |
|---------------------------------|-------------|
| Total Estimated Study Cost      | \$2,100,000 |
| Reconnaissance Phase (Federal)  | 100,000     |
| Feasibility Phase (Federal)     | 1,000,000   |
| Feasibility Phase (Non-Federal) | 1,000,000   |

The reconnaissance phase is scheduled for completion in May 2001. The feasibility study completion date is being determined.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Division: South Atlantic

| Study/Project                         | Total<br>Estimated<br>Federal Cost<br>\$ | Allocation<br>Prior to<br>FY 2001<br>\$ | Allocation<br>FY 2001<br>\$ | Tentative<br>Allocation<br>FY 2002<br>\$ | Additional<br>to Complete<br>After FY 2002<br>\$ |
|---------------------------------------|------------------------------------------|-----------------------------------------|-----------------------------|------------------------------------------|--------------------------------------------------|
| South Carolina                        |                                          |                                         |                             |                                          |                                                  |
| Waccamaw River<br>Charleston District | 600,000                                  | 0                                       | 55,000                      | 195,000                                  | 350,000                                          |

The Waccamaw River spans the coastal plain region of North Carolina and South Carolina and has a drainage area of approximately 1,530 square miles. Flooding has occurred throughout the basin resulting in the construction of ten Army Corps of Engineers small flood control projects over the past 40 years. The most recent flooding occurred as a result of Hurricanes Floyd and Irene in the Fall of 1999 when the Waccamaw crested at 6.2 feet over flood stage. Approximately 1,200 homes were affected by the flooding with approximately 850 incurring structural damage. Septic systems and wells were flooded and many of the roads throughout Horry County were impassable. Raw sewage from flooded septic tanks contaminated the Waccamaw River and adjoining tributaries, causing serious health threats to the populace. Annual flood damages are estimated at \$800,000. As development progresses in the eastern portion of the basin, flood problems will intensify near the cities of Conway, Myrtle Beach, and North Myrtle Beach, the primary growth areas. Continued growth and flooding in the area warrant investigation and resolution of the flood problems as quickly as possible. The reconnaissance study will identify water resource problems, identify Federal interests within the basin with particular attention on opportunities for flood damage reduction, water quality improvements, and opportunities to restore fish and wildlife habitat. The State of South Carolina is the potential cost-sharing partner and understands the cost-sharing requirements of the feasibility phase.

Fiscal Year 2001 funds are being used to initiate the reconnaissance phase of the study. The funds requested for Fiscal Year 2002 will be used to complete the reconnaissance phase of the study and initiate the feasibility phase. The preliminary estimated cost of the feasibility phase is \$1,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

|                                 |             |
|---------------------------------|-------------|
| Total Estimated Study Cost      | \$1,100,000 |
| Reconnaissance Phase (Federal)  | 100,000     |
| Feasibility Phase (Federal)     | 500,000     |
| Feasibility Phase (Non-Federal) | 500,000     |

The reconnaissance phase is scheduled for completion in March 2002. The feasibility study schedule is being determined.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Division: South Atlantic

| Study/Project                                                       | Total<br>Estimated<br>Federal Cost<br>\$ | Allocation<br>Prior to<br>FY 2001<br>\$ | Allocation<br>FY 2001<br>\$ | Tentative<br>Allocation<br>FY 2002<br>\$ | Additional<br>to Complete<br>After FY 2002<br>\$ |
|---------------------------------------------------------------------|------------------------------------------|-----------------------------------------|-----------------------------|------------------------------------------|--------------------------------------------------|
| Virginia                                                            |                                          |                                         |                             |                                          |                                                  |
| John H. Kerr Dam and<br>Reservoir, VA and NC<br>Wilmington District | 1,650,000                                | 86,000                                  | 200,000                     | 400,000                                  | 964,000                                          |

*John H. Kerr Dam and Reservoir is located in the Roanoke River Basin which extends into north-central North Carolina and south-central Virginia. The project was completed in 1952 and provides hydropower, flood control, water supply, and recreation. Two downstream non-Federal hydropower reservoirs, Gaston and Roanoke Rapids, operated by the Dominion Power Company have minimal active storage for daily hydropower peaking. The Kerr, Gaston and Roanoke Rapids projects operate cooperatively generating power, controlling flooding, and ensuring adequate downstream flows. The lower Roanoke River basin is one of the finest remaining swamp forest ecosystems within the eastern United States. These bottomland hardwood forests, wetlands, uplands, and streams provide a high quality habitat for fish and wildlife, including waterfowl. Federal and State agencies have expressed concern that there is a probable correlation between fish kills and low dissolved oxygen in the lower Roanoke River basin and the operation of Kerr Reservoir. Resource concerns for the Lower Roanoke center on the need for restoration and enhancement of extensive swamp and flood plain forests and fisheries through improvements to the hydrologic regime. The State of North Carolina would be the potential sponsor and understands the cost share requirements on the feasibility study. The initial appraisal was approved in May 1997. A Feasibility Cost Sharing Agreement (FCSA) is scheduled to be signed in June 2001.*

Fiscal Year 2001 funds will be used to complete the reconnaissance phase and initiate the feasibility phase of the study including engineering, economic and environmental studies. Fiscal year 2002 funds will be used to continue the feasibility phase, including watershed, hydrodynamic and water quality monitoring and modeling. The preliminary estimated cost of the feasibility phase is \$3,000,000 which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

|                                 |             |
|---------------------------------|-------------|
| Total Estimated Study Cost      | \$3,150,000 |
| Reconnaissance Phase (Federal)  | 150,000     |
| Feasibility Phase (Federal)     | 1,500,000   |
| Feasibility Phase (Non-Federal) | 1,500,000   |

The reconnaissance phase is scheduled for completion in June 2001. The feasibility study completion is being determined.



APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Division: South Atlantic

| Study/Project                                      | Total<br>Estimated<br>Federal Cost<br>\$ | Allocation<br>Prior to<br>FY 2001<br>\$ | Allocation<br>FY 2001<br>\$ | Tentative<br>Allocation<br>FY 2002<br>\$ | Additional<br>to Complete<br>After FY 2002<br>\$ |
|----------------------------------------------------|------------------------------------------|-----------------------------------------|-----------------------------|------------------------------------------|--------------------------------------------------|
| c. Shoreline Protection Studies                    |                                          |                                         |                             |                                          |                                                  |
| Alabama                                            |                                          |                                         |                             |                                          |                                                  |
| Baldwin County Shore Protection<br>Mobile District | 1,100,000                                | 86,000                                  | 14,000                      | 100,000                                  | 900,000                                          |

The study area is located on the coast of the Gulf of Mexico in Baldwin County in the southwestern part of Alabama. Baldwin County Beaches extends from Perdido Key at the Alabama-Florida State line to Fort Morgan, a distance of about 30 miles. The area has a high degree of development and has experienced beach erosion and storm damage over the last 25 to 30 years. In September 1998, Hurricane Georges caused \$64 million worth of damage in Baldwin County, with 10,128 structures requiring evacuation and/or suffering damages. A restored beach would provide hurricane damage protection for residential and commercial buildings, roads, and drainage structures, as well as additional public use. The study will be conducted for the purpose of investigating the severe erosion problems to determine if feasible solutions can be formulated to reduce shoreline erosion and storm induced damages. Baldwin County and the City of Gulf Shores are potential sponsors and they understand the cost-share requirements of the feasibility phase. The Feasibility Cost Sharing Agreement is scheduled to be signed in December 2001.

Fiscal Year 2000 carryover funds are being used in FY 2001 to complete the reconnaissance phase at full Federal expense. If the reconnaissance report is certified to be in accord with policy, the funds requested for FY 2002 would be used to continue into the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is \$2,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

|                                 |             |
|---------------------------------|-------------|
| Total Estimated Study Cost      | \$2,100,000 |
| Reconnaissance Phase (Federal)  | 100,000     |
| Feasibility Phase (Federal)     | 1,000,000   |
| Feasibility Phase (Non-Federal) | 1,000,000   |

The reconnaissance phase is scheduled for completion in December 2001. The feasibility phase study completion date is to be determined.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Division: South Atlantic

| Study/Project                      | Total<br>Estimated<br>Federal Cost<br>\$ | Allocation<br>Prior to<br>FY 2001<br>\$ | Allocation<br>FY 2001<br>\$ | Tentative<br>Allocation<br>FY 2002<br>\$ | Additional<br>to Complete<br>After FY 2002<br>\$ |
|------------------------------------|------------------------------------------|-----------------------------------------|-----------------------------|------------------------------------------|--------------------------------------------------|
| North Carolina                     |                                          |                                         |                             |                                          |                                                  |
| Bogue Banks<br>Wilmington District | 1,735,000                                | 100,000                                 | 250,000                     | 400,000                                  | 985,000                                          |

The study area is located between Beaufort Inlet to the east and Bogue Inlet to the west. The barrier island is approximately 24 miles in length with the Atlantic Ocean to the south and Bogue Sound to the north. From east to west the communities of Atlantic Beach, Pine Knoll Shores, Salter Path, Indian Beach, and Emerald Isle are located on Bogue Banks. Fort Macon State Park is located at the east end adjacent to Beaufort Inlet and the Theodore Roosevelt Natural Area at the west end is located adjacent to Pine Knoll Shores. The communities are rapidly growing and visitation to Bogue Banks is high due to the unique character of the island and the presence of one of the last remaining maritime forests on a barrier island in North Carolina. Several of the communities including Emerald Isle which covers the western third of the island are concerned about erosion along their shorelines. This erosion is threatening the primary dune system and the structures which are located along the ocean shoreline. Local interests desire a shore protection project consisting of beach renourishment to provide protection to the upland structures. Recent storms including Hurricanes Fran and Bertha during the summer of 1996 have caused considerable erosion to the natural protective dune system and sever damage to upland structures due to storm surge and wave action. Carteret County would be the potential sponsor and understands the cost share requirements on the feasibility study. The Reconnaissance Phase will address the shore erosion issues and explore shore protection alternatives. Siesmic exploration of potential offshore borrow areas, environmental baseline data collection and economic baseline data collection are scheduled to be performed during Fiscal Year 2002. A Feasibility Cost Sharing Agreement was signed in February 2001.

Fiscal Year 2001 funds will be used to complete the reconnaissance phase of the study. If the reconnaissance report is certified to be in accord with policy, the funds requested for Fiscal Year 2002 will be used to continue the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is \$3,270,000 which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

|                                 |             |
|---------------------------------|-------------|
| Total Estimated Study Cost      | \$3,370,000 |
| Reconnaissance Phase (Federal)  | 100,000     |
| Feasibility Phase (Federal)     | 1,635,000   |
| Feasibility Phase (Non-Federal) | 1,635,000   |

The reconnaissance phase was completed in February 2001. The feasibility study completion is being determined

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Division: South Atlantic

| Study/Project                                                                   | Total<br>Estimated<br>Federal Cost<br>\$ | Allocation<br>Prior to<br>FY 2001<br>\$ | Allocation<br>FY 2001<br>\$ | Tentative<br>Allocation<br>FY 2002<br>\$ | Additional<br>to Complete<br>After FY 2002<br>\$ |
|---------------------------------------------------------------------------------|------------------------------------------|-----------------------------------------|-----------------------------|------------------------------------------|--------------------------------------------------|
| Dare County Beaches, NC<br>(Hatteras & Ocracoke Portion)<br>Wilmington District | 3,075,000                                | 15,000                                  | 500,000                     | 100,000                                  | 2,460,000                                        |

The study area is approximately 80 miles long and covers the southern limits of Dare County from Oregon Inlet to Hatteras Inlet (Pea Island and Hatteras Island) and the northern limits of Hyde County from Hatteras Inlet to Ocracoke Inlet (Ocracoke Island). The area is primarily part of the Cape Hatteras National Seashore; however, there are a number of small resort towns located in the area including: Rodanthe; Waves; Salvo; Avon; Buxton; Frisco; Hatteras; and Ocracoke Village. Development consists of residences, lodging, and businesses engaged in sales and services to satisfy the needs of tourists and year-round residents. In recent years the area has experienced considerable erosion and damages to the NC12 transportation system as a result of storms. Local interests would like protection for the NC12 transportation system to reduce damages from storms and prevent long-term erosion impacts. The North Carolina Department of Transportation is the sponsor and understands the cost share requirements on the feasibility study. NC12 is the only transportation corridor for hurricane evacuation. The Sponsor has already invested \$1,500,000 towards its share of the study cost. A partnership has been formed for the protection of NC12 and includes NCDOT, NPS, F&WL Service, NMFS, Corps, Dare County, and Hyde County. Work to be performed in Fiscal Year 2002 includes engineering studies of shoreline changes, profile data, beach profile sand samples and storm characteristics and environmental data acquisition and analysis. A Feasibility Cost Sharing Agreement is scheduled to be signed in June 2001.

Fiscal Year 2001 funds will be used to complete the reconnaissance phase of the study. Fiscal Year 2002 funds will be used to continue into the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is \$6,000,000 which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

|                                 |             |
|---------------------------------|-------------|
| Total Estimated Study Cost      | \$6,075,000 |
| Reconnaissance Phase (Federal)  | 75,000      |
| Feasibility Phase (Federal)     | 3,000,000   |
| Feasibility Phase (Non-Federal) | 3,000,000   |

The reconnaissance phase is scheduled for completion in June 2001. The feasibility study is scheduled for completion is being determined.

APPROPRIATION TITLE. General Investigations, Fiscal Year 2002

Division: South Atlantic

| Study/Project                                            | Total<br>Estimated<br>Federal Cost<br>\$ | Allocation<br>Prior to<br>FY 2001<br>\$ | Allocation<br>FY 2001<br>\$ | Tentative<br>Allocation<br>FY 2002<br>\$ | Additional<br>to Complete<br>After FY 2002<br>\$ |
|----------------------------------------------------------|------------------------------------------|-----------------------------------------|-----------------------------|------------------------------------------|--------------------------------------------------|
| Surf City and North Topsail Beach<br>Wilmington District | 1,600,000                                | 0                                       | 100,000                     | 100,000                                  | 1,400,000                                        |

The towns of Surf City and North Topsail Beach are located on Topsail Island. Topsail Island is a barrier island located about 25 miles northeast of Wilmington, NC. It is between New Topsail Inlet and New River Inlet. From north to south the communities of North Topsail Beach, Surf City and Topsail Beach are located on Topsail Island. As a result of Hurricane Fran in 1996, the damage to publicly owned properties exceeded \$3,000,000, the total losses paid to privately owned property from FEMA was \$11,055,247 and private insurance payments probably exceeded both of these amounts in Surf City. This storm also caused damages to publicly owned properties exceeding \$2,000,000 and losses to privately owned property were \$21,000,000 in North Topsail Beach. In 1996 Hurricanes Bertha and Fran produced an erosion of at least 25 feet of shoreline leaving 66 percent of the Surf City and North Topsail Beach shoreline without its natural vegetation. This erosion, along with recent hurricanes has either severely damaged or destroyed the primary dune system and the structures along the ocean shoreline leaving the towns vulnerable to damage from future storm events. Topsail Island, of which Surf City and North Topsail Beach are a major part, is an established rookery for the Loggerhead Turtle. The town of Surf City has established a beach renourishment committee that has been meeting with property owners. They have determined that property owners are willing to support a shore protection study and project, if feasible. Both communities would be the potential sponsors and they understand the cost share requirements on the feasibility study. The Reconnaissance Phase will address the shore erosion issues and explore shore protection alternatives. The study will determine whether or not the problems warrant Federal participation and the Federal interest in potential project alternatives, as well as develop a Project Study Plan (PSP), which would include scopes, schedules and cost estimate for the Feasibility Phase. A feasibility cost sharing agreement is scheduled to be signed in January 2002.

Fiscal Year 2001 funds will be used to complete the reconnaissance phase. If the reconnaissance report is certified to be in accord with policy, Fiscal Year 2002 funds will be used to initiate the feasibility phase. The preliminary cost of the feasibility phase is \$3,000,000, which is to be cost shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the cost sharing is as follows:

|                                 |             |
|---------------------------------|-------------|
| Total Estimated Study Cost      | \$3,100,000 |
| Reconnaissance Phase (Federal)  | 100,000     |
| Feasibility Phase (Federal)     | 1,500,000   |
| Feasibility Phase (Non-Federal) | 1,500,000   |

The reconnaissance phase is scheduled for completion in January 2002. The feasibility phase completion is being determined.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Division: South Atlantic

| Study/Project                         | Total<br>Estimated<br>Federal Cost<br>\$ | Allocation<br>Prior to<br>FY 2001<br>\$ | Allocation<br>FY 2001<br>\$ | Tentative<br>Allocation<br>FY 2002<br>\$ | Additional<br>to Complete<br>After FY 2002<br>\$ |
|---------------------------------------|------------------------------------------|-----------------------------------------|-----------------------------|------------------------------------------|--------------------------------------------------|
| South Carolina                        |                                          |                                         |                             |                                          |                                                  |
| Pawleys Island<br>Charleston District | 478,000                                  | 192,000                                 | 186,000                     | 100,000                                  | 0                                                |

Pawleys Island is a 3.5 mile long barrier island located approximately 22 miles southwest of Myrtle Beach and 13 miles northeast of Georgetown, South Carolina. Approximately 250 homes are located on this island, which is currently experiencing erosion and storm damage problems that threaten homes, roads, and public utilities. Prior storm events have resulted in breaches of the main access road and damages to electric, water, and sewage lines. The southern portion of Pawleys Island is narrow and particularly susceptible to breaching, which could isolate as many as 50 homes from the mainland. This study will assess the viability of developing a protective sand berm to reduce storm damages. The Town of Pawleys Island is the local sponsor. They have expressed their interest in the project by execution of the FCSA on April 28, 2000.

Fiscal Year 2001 funds are being used to continue the feasibility phase. The funds requested for Fiscal Year 2002 will be used to complete the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is \$696,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

|                                 |           |
|---------------------------------|-----------|
| Total Estimated Study Cost      | \$826,000 |
| Reconnaissance Phase (Federal)  | 130,000   |
| Feasibility Phase (Federal)     | 348,000   |
| Feasibility Phase (Non-Federal) | 348,000   |

The reconnaissance phase was completed in April 2000. The feasibility study is scheduled for completion in June 2002.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Division: South Atlantic

| Study/Project                              | Total<br>Estimated<br>Federal Cost<br>\$ | Allocation<br>Prior to<br>FY 2001<br>\$ | Allocation<br>FY 2001<br>\$ | Tentative<br>Allocation<br>FY 2002<br>\$ | Additional<br>to Complete<br>After FY 2002<br>\$ |
|--------------------------------------------|------------------------------------------|-----------------------------------------|-----------------------------|------------------------------------------|--------------------------------------------------|
| d. Special Studies                         |                                          |                                         |                             |                                          |                                                  |
| Alabama                                    |                                          |                                         |                             |                                          |                                                  |
| Cahaba River Watersheds<br>Mobile District | 1,373,000                                | 230,000                                 | 80,000                      | 160,000                                  | 903,000                                          |

The study area encompasses the Cahaba River Watershed in Jefferson and Shelby Counties in Northern Alabama. The watershed has a total drainage area of 270 square miles. The June 1999 flooding caused damages to businesses and homes in several Jefferson County municipalities, especially Birmingham, Irondale, and Mountain Brook. Mountain Brook had six inches and Irondale had 4.5 inches of rain within 1.5 hours. There is an urgent need to address the flooding associated with storm water runoff, and to identify flood damage reduction needs. The Section 905(b) Analysis concluded that there is adequate justification to proceed to the feasibility phase. Reconnaissance phase efforts are underway to identify willing non-Federal sponsors and to develop a Project Study Plan and Feasibility Cost Sharing Agreement. The feasibility study will include engineering, economic, and environmental investigations to address flooding associated with storm water runoff and to identify flood damage reduction needs. Jefferson County and the affected municipalities are the potential non-Federal sponsors and they understand the requirements for study cost sharing. The Feasibility Cost Sharing Agreement is scheduled to be signed in September 2001.

FY 2001 funds are being used to fully fund the reconnaissance phase at full Federal expense. If the reconnaissance report is certified to be in accord with policy, funds requested for FY 2002 will be used to continue into the feasibility phase. The preliminary estimated cost of the feasibility phase is \$2,125,000, which is to be shared on a 50 - 50 percent basis by Federal and non-Federal interests. A summary of study costs sharing is as follows:

|                                 |             |
|---------------------------------|-------------|
| Total Estimated Study Cost      | \$2,435,000 |
| Reconnaissance Phase (Federal)  | 310,000     |
| Feasibility Phase (Federal)     | 1,063,000   |
| Feasibility Phase (Non-Federal) | 1,062,000   |

The reconnaissance phase is scheduled for completion in September 2001. The feasibility phase completion date is to be determined.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Division: South Atlantic

| Study/Project                                                                | Total<br>Estimated<br>Federal Cost<br>\$ | Allocation<br>Prior to<br>FY 2001<br>\$ | Allocation<br>FY 2001<br>\$ | Tentative<br>Allocation<br>FY 2002<br>\$ | Additional<br>to Complete<br>After FY 2002<br>\$ |
|------------------------------------------------------------------------------|------------------------------------------|-----------------------------------------|-----------------------------|------------------------------------------|--------------------------------------------------|
| Village Creek, Jefferson County<br>(Birmingham Watershed)<br>Mobile District | 1,463,000                                | 493,000                                 | 187,000                     | 250,000                                  | 533,000                                          |

The study area encompasses the watersheds in metropolitan Birmingham, Alabama that are located in the Black Warrior River Basin, including Village Creek and Valley Creek, in Jefferson County in northern Alabama. Due to recent flooding, there is an urgent need to examine the area for flood damage prevention. Floods in October 1995, January 1996, and March 1996 damaged over 1,000 residential and commercial properties in the Village Creek watershed with damages estimated to be about \$5,000,000. The feasibility study will include engineering, economic, and environmental investigations to identify potential alternatives that would alleviate flood damages. The City of Birmingham is the local sponsor and understands the requirements for study cost sharing. Feasibility Cost Sharing Agreement was signed in March 1999.

Fiscal Year 2001 funds are being used to continue the feasibility phase of the study. The funds requested for Fiscal Year 2002 will be used to continue the feasibility phase of the study. The estimated cost of the feasibility phase is \$2,686,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

|                                 |             |
|---------------------------------|-------------|
| Total Estimated Study Cost      | \$2,806,000 |
| Reconnaissance Phase (Federal)  | 120,000     |
| Feasibility Phase (Federal)     | 1,343,000   |
| Feasibility Phase (Non-Federal) | 1,343,000   |

The reconnaissance phase was completed in March 1999. The feasibility phase study completion is to be determined.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Division: South Atlantic

| Study/Project                        | Total<br>Estimated<br>Federal Cost<br>\$ | Allocation<br>Prior to<br>FY 2001<br>\$ | Allocation<br>FY 2001<br>\$ | Tentative<br>Allocation<br>FY 2002<br>\$ | Additional<br>to Complete<br>After FY 2002<br>\$ |
|--------------------------------------|------------------------------------------|-----------------------------------------|-----------------------------|------------------------------------------|--------------------------------------------------|
| Georgia                              |                                          |                                         |                             |                                          |                                                  |
| Arabia Mountain<br>Savannah District | 1,100,000                                | 0                                       | 75,000                      | 60,000                                   | 965,000                                          |

The Davidson-Arabia Mountain Nature Preserve is located on the southeast quadrant of DeKalb County in Lithonia, Georgia. It is approximately 5 miles southeast of the I-20 and I-285 intersection and is a 20-minute drive from downtown Atlanta, Georgia. Stevenson Creek, a tributary of the South River, runs through the Arabia Mountain Preserve. The Arabia Mountain Preserve is comprised of 535 acres of granite outcrop with wetlands, pine and oak forests, streams, and a lake. It sustains two federally protected and endangered plant species and one federally listed threatened species. The unique and rare vernal pools, which are considered wetlands, are critical habitat for these species. DeKalb County is the potential sponsor and understands the requirements for study cost sharing.

The Arabia Mountain Preserve has received the Nature Conservancy's most urgent priority preservation rating. Past mining has contributed to the degradation of this unique ecosystem. An earthen dam within the Preserve was built on Stevenson Creek over 75 years ago. The earthen dam and a firing range within the Stevenson Creek watershed are potentially contributing to the degradation of this ecosystem.

Fiscal Year 2001 funds are being used to fully fund the reconnaissance phase at full Federal expense. If the reconnaissance report is certified to be in accord with policy, the funds requested for Fiscal Year 2002 will be used to continue into the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is \$2,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

|                                 |             |
|---------------------------------|-------------|
| Total Estimated Study Cost      | \$2,100,000 |
| Reconnaissance Phase (Federal)  | 100,000     |
| Feasibility Phase (Federal)     | 1,000,000   |
| Feasibility Phase (Non-Federal) | 1,000,000   |

The reconnaissance phase is scheduled for completion in September 2002. The feasibility study completion date is being determined.



APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Division: South Atlantic

| Study/Project                     | Total<br>Estimated<br>Federal Cost<br>\$ | Allocation<br>Prior to<br>FY 2001<br>\$ | Allocation<br>FY 2001<br>\$ | Tentative<br>Allocation<br>FY 2002<br>\$ | Additional<br>to Complete<br>After FY 2002<br>\$ |
|-----------------------------------|------------------------------------------|-----------------------------------------|-----------------------------|------------------------------------------|--------------------------------------------------|
| Allatoona Lake<br>Mobile District | 926,000                                  | 251,000                                 | 107,000                     | 300,000                                  | 268,000                                          |

Allatoona Lake is a federal project located on the Etowah River, a tributary to the Coosa River, 48 miles above Rome, Georgia. The project includes a dam, hydroelectric powerhouse, gated spillway, a flood control reservoir and 31 recreational areas over 37,000 acres. The recent "Clean Lake Study" commissioned by local water authorities and undertaken by the A. L. Burris Institute of Public Service at Kennesaw State University sought to identify environmental problems within Lake Allatoona. The study notes that pollution has affected a tributary of the lake known as the Little River area. The study also concluded that erosion and sedimentation could contribute unwanted loads into the Etowah River and downstream into Lake Allatoona. The study will be conducted to evaluate environmental problems and recommend environmental restoration measures, including structural and non-structural approaches, for the Little River Watershed, which drains into Lake Allatoona. The study will also identify and recommend measures to alleviate shoreline erosion and sedimentation problems, including structural and non-structural solutions, along Lake Allatoona, Little River, and the Etowah River. The Lake Allatoona Preservation Authority is the potential sponsor and they understand the cost-share requirements of the feasibility phase. The Feasibility Cost Sharing Agreement is scheduled to be signed in June 2001.

Fiscal Year 2001 funds are being used to complete the reconnaissance phase at full Federal expense, and since the reconnaissance report was certified to be in accord with policy, to continue into the feasibility phase. Funds requested for Fiscal Year 2002 will be used to continue the feasibility phase of the study. The preliminary estimated cost of the feasibility phase is \$1,350,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

|                                 |             |
|---------------------------------|-------------|
| Total Estimated Study Cost      | \$1,601,000 |
| Reconnaissance Phase (Federal)  | 251,000     |
| Feasibility Phase (Federal)     | 675,000     |
| Feasibility Phase (Non-Federal) | 675,000     |

The reconnaissance phase is scheduled for completion in June 2001. The feasibility phase study completion date is to be determined.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Division: South Atlantic

| Study/Project                                                              | Total<br>Estimated<br>Federal Cost<br>\$ | Allocation<br>Prior to<br>FY 2001<br>\$ | Allocation<br>FY 2001<br>\$ | Tentative<br>Allocation<br>FY 2002<br>\$ | Additional<br>to Complete<br>After FY 2002<br>\$ |
|----------------------------------------------------------------------------|------------------------------------------|-----------------------------------------|-----------------------------|------------------------------------------|--------------------------------------------------|
| Indian, Sugar, Intrenchment, &<br>Federal Prison Creeks<br>Mobile District | 1,130,000                                | 86,000                                  | 44,000                      | 100,000                                  | 900,000                                          |

Indian, Sugar, Intrenchment, and Federal Prison Creeks are located within the metropolitan Atlanta watershed in portions of DeKalb County, Fulton County and the City of Atlanta. Fulton County and DeKalb County, Georgia and the City of Atlanta have passed floodplain regulations, resolutions, or ordinances to restrict development in flood-prone areas; however, the rapid urbanization of the metropolitan Atlanta area prior to their passage resulted in the development of many areas subject to periodic flooding. Both scarcity of land and attractiveness of streamside areas contributed to encroachment on the floodplain. Local drainage patterns have also been greatly altered by urbanization. At many locations, extensive storm drain systems have been used to substantially alter natural drainage patterns in order to remove water quickly. Rapid urbanization in the metropolitan Atlanta area over the last few decades has resulted in increases in the magnitude and frequency of severe floods; increased streambank erosion; depreciated water quality; a reduction in diversity and abundance of aquatic insects and fish; and destruction of wetlands, riparian buffers, and springs. This study will be conducted for the purpose of developing a comprehensive watershed plan for parts of metropolitan Atlanta, including Indian, Sugar, Intrenchment, Federal Prison, and Snapfinger Creeks. Development of the master plan will be based on a thorough assessment of the changes in stream hydrology, morphology, water quality and habitat and ecology. DeKalb County and the City of Atlanta are potential sponsors and they understand the cost-share requirements of the feasibility phase. Feasibility Cost Sharing Agreement is scheduled to be signed in October 2001.

FY 2001 funds are being used to complete the reconnaissance phase at full Federal expense. If the reconnaissance report is certified to be in accord with policy, funds requested for fiscal year 2002 will be used to continue into the feasibility phase. The preliminary estimated cost of the feasibility phase is \$2,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

|                                 |             |
|---------------------------------|-------------|
| Total Estimated Study Cost      | \$2,130,000 |
| Reconnaissance Phase (Federal)  | 130,000     |
| Feasibility Phase (Federal)     | 1,000,000   |
| Feasibility Phase (Non-Federal) | 1,000,000   |

The reconnaissance phase is scheduled for completion in October 2001. The feasibility phase study completion date is to be determined.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Division: South Atlantic

| Study/Project                                       | Total<br>Estimated<br>Federal Cost<br>\$ | Allocation<br>Prior to<br>FY 2001<br>\$ | Allocation<br>FY 2001<br>\$ | Tentative<br>Allocation<br>FY 2002<br>\$ | Additional<br>to Complete<br>After FY 2002<br>\$ |
|-----------------------------------------------------|------------------------------------------|-----------------------------------------|-----------------------------|------------------------------------------|--------------------------------------------------|
| Long Island, Marsh, Johns Creeks<br>Mobile District | 1,100,000                                | 86,000                                  | 14,000                      | 100,000                                  | 900,000                                          |

Long Island, Marsh and Johns Creeks are located within the metropolitan Atlanta watershed principally in Fulton County. Fulton County, Georgia has passed floodplain regulations, resolutions, or ordinances to restrict development in flood-prone areas; however, rapid urbanization prior to their passage resulted in the development of many areas subject to periodic flooding. Both the scarcity of land and attractiveness of streamside areas contributed to encroachment on the floodplain. Local drainage patterns have also been greatly altered by the urbanization of the metropolitan area. At many locations, extensive storm drain systems have been used to substantially alter natural drainage patterns in order to remove water quickly. Rapid urbanization in the metropolitan Atlanta area over the last few decades has resulted in increases in the magnitude and frequency of severe floods; increased streambank erosion; depreciated water quality; a reduction in diversity and abundance of aquatic insects and fish; and destruction of wetlands, riparian buffers, and springs. The study will be conducted for the purpose of developing a comprehensive watershed plan for parts of metropolitan Atlanta, including Long Island, Marsh and Johns Creeks. Development of the master plan will be based on a thorough assessment of the changes in stream hydrology, morphology, water quality and habitat and ecology. Fulton County is the potential sponsor and understands the cost-share requirements of the feasibility phase. Feasibility Cost Sharing Agreement is scheduled to be signed in November 2001.

FY 2000 carryover funds are being used in FY 2001 to complete the reconnaissance phase at full Federal expense. If the reconnaissance report is certified to be in accord with policy, funds requested for FY 2002 will be used to continue into the feasibility phase. The preliminary estimated cost of the feasibility phase is \$2,000,000, which is to be cost-shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing follows:

|                                 |             |
|---------------------------------|-------------|
| Total Estimated Study Cost      | \$2,100,000 |
| Reconnaissance Phase (Federal)  | 100,000     |
| Feasibility Phase (Federal)     | 1,000,000   |
| Feasibility Phase (Non-Federal) | 1,000,000   |

The reconnaissance phase is scheduled for completion in November 2001. The feasibility phase study completion date is to be determined.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Division: South Atlantic

| Study/Project                              | Total<br>Estimated<br>Federal Cost<br>\$ | Allocation<br>Prior to<br>FY 2001<br>\$ | Allocation<br>FY 2001<br>\$ | Tentative<br>Allocation<br>FY 2002<br>\$ | Additional<br>to Complete<br>After FY 2002<br>\$ |
|--------------------------------------------|------------------------------------------|-----------------------------------------|-----------------------------|------------------------------------------|--------------------------------------------------|
| Metro Atlanta Watershed<br>Mobile District | 2,230,000                                | 1,731,000                               | 274,000                     | 175,000                                  | 50,000                                           |

Study is being conducted to develop a comprehensive watershed master plan for parts of metropolitan Atlanta in the Peachtree and Nancy Creeks Watershed. DeKalb County and Fulton County, Georgia and the City of Atlanta have passed floodplain regulations, resolutions, or ordinances to restrict development in flood-prone areas; however, rapid urbanization of metropolitan Atlanta resulted in development of many areas subject to periodic flooding prior to passage of these rules. Change in stream morphology resulted from stream channel widening, increased streambank erosion, elimination of pool/riffle structure, and imbedding of stream sediments. Changes in stream water quality resulted from massive pulse of sediment during construction stages, increased pollutant loads in storm water runoff, and increased trash/debris jams. Development of the master plan will be based on a thorough assessment of changes in stream hydrology, morphology, water quality, habitat, and ecology. There are over 600 residential structures in the 100-year flood plain. Study will identify potential alternatives to alleviate flood damage, water quality, and inter-related storm drainage and sanitary sewer infrastructure problems, and enhance environmental quality. DeKalb County, Fulton County, and the City of Atlanta are the sponsors, and they understand the requirements for study cost sharing. Feasibility Cost Sharing Agreement was signed in July 1998.

Fiscal Year 2001 funds are being used to continue the feasibility phase of the study. Funds requested for FY 2002 will be used to continue the feasibility study. The preliminary estimated cost of the feasibility phase is \$3,400,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

|                                 |             |
|---------------------------------|-------------|
| Total Estimated Study Cost      | \$3,930,000 |
| Reconnaissance Phase (Federal)  | 530,000     |
| Feasibility Phase (Federal)     | 1,700,000   |
| Feasibility Phase (Non-Federal) | 1,700,000   |

The reconnaissance phase was completed in July 1998. The feasibility phase study completion date is to be determined.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Division: South Atlantic

| Study/Project                                  | Total<br>Estimated<br>Federal Cost<br>\$ | Allocation<br>Prior to<br>FY 2001<br>\$ | Allocation<br>FY 2001<br>\$ | Tentative<br>Allocation<br>FY 2002<br>\$ | Additional<br>to Complete<br>After FY 2002<br>\$ |
|------------------------------------------------|------------------------------------------|-----------------------------------------|-----------------------------|------------------------------------------|--------------------------------------------------|
| Savannah Harbor Ecosystem<br>Savannah District | 1,690,000                                | 405,000                                 | 450,000                     | 350,000                                  | 485,000                                          |

The Savannah River Basin encompasses an area of 11,000 square miles in Georgia and South Carolina. Major cities in the basin are Savannah and Augusta, Georgia, and Aiken, South Carolina. Recent studies by the Corps of Engineers, the states of Georgia and South Carolina, and Federal and State agencies have highlighted that there are current water resource problems and needs being encountered in the Savannah River Basin that need to be investigated. A critical need to address dissolved oxygen levels in Savannah Harbor was identified by several major stakeholders. Although the focus of this problem is Savannah Harbor, modeling and technical work will extend to Augusta, Georgia to evaluate upstream contributions to point and non-point source loads. Evaluation of dissolved oxygen in Savannah Harbor is a complex issue due to the dynamic nature of the tidal estuary, the complicated hydraulic processes in the harbor, and uncertainties associated with related biological components. The historical seasonal lowering of dissolved oxygen in Savannah Harbor is well documented and illustrates an annual impairment of the estuary's ecosystem. Two endangered species, the shortnose sturgeon and the manatee, are common in the estuary and can be affected by low levels of dissolved oxygen. The channel deepenings, which have occurred this century, have impacted the geography and thus the hydrology of the river channel. Increased channel depths have reduced vertical mixing. Higher salinity levels and lower dissolved oxygen have resulted. Data from sampling during summer low flow periods indicate dissolved oxygen levels below one in the navigation channel. These levels are not supportive of a healthy, productive, aquatic ecosystem. The local sponsor, the City of Savannah, signed the Feasibility Cost Sharing agreement 2 August 1999.

Fiscal Year 2001 funds are being used to continue the feasibility phase of the study. The funds requested for Fiscal Year 2002 will be used to complete the feasibility phase. The estimated cost of the feasibility phase is \$3,220,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

|                                 |             |
|---------------------------------|-------------|
| Total Estimated Study Cost      | \$3,300,000 |
| Reconnaissance Phase (Federal)  | 80,000      |
| Feasibility Phase (Federal)     | 1,610,000   |
| Feasibility Phase (Non-Federal) | 1,610,000   |

The reconnaissance phase was completed in August 1999. The feasibility study completion date is being determined.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Division: South Atlantic

| Study/Project                                     | Total<br>Estimated<br>Federal Cost<br>\$ | Allocation<br>Prior to<br>FY 2001<br>\$ | Allocation<br>FY 2001<br>\$ | Tentative<br>Allocation<br>FY 2002<br>\$ | Additional<br>to Complete<br>After FY 2002<br>\$ |
|---------------------------------------------------|------------------------------------------|-----------------------------------------|-----------------------------|------------------------------------------|--------------------------------------------------|
| Utoy, Sandy and Proctor Creeks<br>Mobile District | 1,100,000                                | 86,000                                  | 14,000                      | 150,000                                  | 850,000                                          |

Utoy, Sandy and Proctor Creeks are located within the metropolitan Atlanta watershed in middle western portions of Fulton County, and the City of Atlanta. Fulton County, Georgia and the City of Atlanta have passed floodplain regulations, resolutions, or ordinances to restrict development in flood-prone areas; however, the rapid urbanization of the metropolitan Atlanta area prior to passage of these regulations, resolutions, or ordinances resulted in the development of many areas subject to periodic flooding. Both the scarcity of land and attractiveness of streamside areas contributed to encroachment on the floodplain. Local drainage patterns have also been greatly altered by the urbanization of the metropolitan area. At many locations, extensive storm drain systems have been used to substantially alter natural drainage patterns in order to remove water quickly. Rapid urbanization in the metropolitan Atlanta area over the last few decades has resulted in increases in the magnitude and frequency of severe floods; increased streambank erosion; depreciated water quality; a reduction in diversity and abundance of aquatic insects and fish; and destruction of wetlands, riparian buffers, and springs. The study will be conducted for the purpose of developing a comprehensive watershed plan for parts of metropolitan Atlanta, including Utoy, Sandy and Proctor Creeks. Development of the master plan will be based on a thorough assessment of the changes in stream hydrology, morphology, water quality and habitat and ecology. The City of Atlanta is a potential sponsor and understands the cost-share requirements of the feasibility phase. Feasibility Cost Sharing Agreement is scheduled to be signed in July 2001.

Fiscal Year 2001 funds are being used to complete the reconnaissance phase at full Federal expense. If the reconnaissance report is certified to be in accord with policy, funds requested for FY 2002 will be used to continue into the feasibility study. The preliminary estimated cost of the feasibility phase is \$2,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

|                                 |             |
|---------------------------------|-------------|
| Total Estimated Study Cost      | \$2,100,000 |
| Reconnaissance Phase (Federal)  | 100,000     |
| Feasibility Phase (Federal)     | 1,000,000   |
| Feasibility Phase (Non-Federal) | 1,000,000   |

The reconnaissance phase is scheduled for completion in July 2001. The feasibility phase study completion date is to be determined.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Division: South Atlantic

| Study/Project                          | Total<br>Estimated<br>Federal Cost<br>\$ | Allocation<br>Prior to<br>FY 2001<br>\$ | Allocation<br>FY 2001<br>\$ | Tentative<br>Allocation<br>FY 2002<br>\$ | Additional<br>to Complete<br>After FY 2002<br>\$ |
|----------------------------------------|------------------------------------------|-----------------------------------------|-----------------------------|------------------------------------------|--------------------------------------------------|
| North Carolina                         |                                          |                                         |                             |                                          |                                                  |
| Currituck Sound<br>Wilmington District | 1,100,000                                | 0                                       | 75,000                      | 200,000                                  | 825,000                                          |

The study area is located in Currituck and Dare Counties in the northeastern part of North Carolina. Currituck Sound is a 153 square mile brackish water estuary separated from the Atlantic Ocean by thin barrier islands known as the Outer Banks. The sound has an average depth of 5 feet and maximum depth of approximately 13 feet. The most significant freshwater inputs to Currituck Sound include North Landing River and Northwest River, both originating in the Great Dismal Swamp of North Carolina and Virginia. Back bay, a 35 square mile estuary located in Virginia, also discharges water into the sound through shallow water channels along the eastern shore. Water level fluctuations in Currituck Sound are a function of prevailing winds from Albemarle Sound; southerly winds force water into Currituck Sound, whereas northerly winds force water out. The cumulative effects of prevailing winds and possible point source inputs of brackish water from Federal canals influence sound salinity. The local interests are concerned about increased salinity levels which have frequently exceeded the threshold for many freshwater fisheries (largemouth bass, black crappie, and bluegill) and have caused a severe decline in these fisheries. In addition, the increased salinity regime has contributed to the loss of extensive submerged aquatic vegetation (SAV). SAV provides a food source for various fish stocks, creates an ideal habitat for numerous migrating waterfowl species, and maintains the stability of the sound bottom. The study will address these water quality issues and explore environmental protection and restoration alternatives. Economic and environmental baseline data collection is scheduled to be performed in Fiscal Year 2002. The State of North Carolina is the sponsor and understands the cost share requirements on the feasibility study. The feasibility cost sharing agreement is scheduled for execution in February 2002.

Fiscal Year 2001 funds are being used to fully fund the reconnaissance phase at full Federal expense. If the reconnaissance report is certified to be in accord with policy, the funds for Fiscal Year 2002 will be used to continue into the feasibility phase of the project. The preliminary estimated cost of the feasibility phase is \$2,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

|                                 |             |
|---------------------------------|-------------|
| Total Estimated Study Cost      | \$2,100,000 |
| Reconnaissance Phase (Federal)  | 100,000     |
| Feasibility Phase (Federal)     | 1,000,000   |
| Feasibility Phase (Non-Federal) | 1,000,000   |

The reconnaissance phase is scheduled for completion in February 2002. The feasibility study is scheduled for completion is being determined.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Division: South Atlantic

| Study/Project                                | Total<br>Estimated<br>Federal Cost<br>\$ | Allocation<br>Prior to<br>FY 2001<br>\$ | Allocation<br>FY 2001<br>\$ | Tentative<br>Allocation<br>FY 2002<br>\$ | Additional<br>to Complete<br>After FY 2002<br>\$ |
|----------------------------------------------|------------------------------------------|-----------------------------------------|-----------------------------|------------------------------------------|--------------------------------------------------|
| Lockwoods Folly River<br>Wilmington District | 1,470,000                                | 142,000                                 | 0                           | 83,000                                   | 1,245,000                                        |

Lockwoods Folly River is 50 miles in length and has a drainage area of 180 square miles. It is located in Brunswick County in southeastern North Carolina and originates at a point about 16 miles southwest of Wilmington and flows first westerly, then southwesterly, and empties into the Atlantic Ocean at a point about 15 miles west of the mouth of the Cape Fear River. A decline in the water quality of the Lockwoods Folly River has progressively taken place over the last decade. This has led to the closure of over 70 percent, more than 1,100 acres of the total available shellfishing acreage in the area due to bacterial contamination. A 1989 North Carolina Division of Water Quality report summarized that probable major sources of bacteria in the River were septic tanks and urban stormwater runoff. Locals are very concerned about hydrologic conditions and sedimentation within the lower estuary due to the location of existing federal navigation channels. The feasibility study will include the development of a comprehensive plan to address measures to improve water quality in the watershed. Alternative measures to be considered include wetland restoration, and riparian area restoration. This study and the proposed outputs are in accord with the Administration's Clean Water initiatives. The potential sponsor for the feasibility study is the State of North Carolina. A Feasibility Cost Sharing Agreement (FCSA) is scheduled to be signed in October 2001.

Fiscal Year 2000 carryover funds will be used to initiate the feasibility phase of the study including engineering, economic and environmental studies. Fiscal year 2002 funds will be used to continue the feasibility phase, including watershed, hydrodynamic and water quality modeling and identification of fecal coliform sources. The estimated cost of the feasibility phase is \$2,700,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

|                                 |             |
|---------------------------------|-------------|
| Total Estimated Study Cost      | \$2,820,000 |
| Reconnaissance Phase (Federal)  | 120,000     |
| Feasibility Phase (Federal)     | 1,350,000   |
| Feasibility Phase (Non-Federal) | 1,350,000   |

The reconnaissance phase is scheduled for completion in October 2001. The feasibility study completion is being determined.



APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Division: South Atlantic

| Study/Project                             | Total<br>Estimated<br>Federal Cost<br>\$ | Allocation<br>Prior to<br>FY 2001<br>\$ | Allocation<br>FY 2001<br>\$ | Tentative<br>Allocation<br>FY 2002<br>\$ | Additional<br>to Complete<br>After FY 2002<br>\$ |
|-------------------------------------------|------------------------------------------|-----------------------------------------|-----------------------------|------------------------------------------|--------------------------------------------------|
| South Carolina                            |                                          |                                         |                             |                                          |                                                  |
| Charleston Estuary<br>Charleston District | 1,677,000                                | 157,000                                 | 0                           | 50,000                                   | 1,470,000                                        |

The Charleston Estuary includes over 50,000 acres of coastal marshes and the water bodies include the tidal reaches of the Ashley, Cooper, Stono and Wando Rivers and lower Charleston Harbor. Charleston's metro area population is expected to increase by 50 percent in the next 20 years and as urban development expands, non-point source pollutants carried into the estuary will increase, further degrading water quality. Environmental restoration opportunities include wetlands, fish and wildlife habitat restoration, and water quality improvements. The reconnaissance report was completed and approved in February 1999. The report recommended a feasibility analysis of several ecosystem restoration areas including: 1) development of a regional wetlands plan to include mechanisms for conservation easements, and deed restrictions while still addressing future growth scenarios; 2) development of a mechanism to facilitate coordination between state cultural resource preservation agencies and the many local preservation agencies to ensure protection of valuable cultural resource sites that are now being overlooked; 3) development of a regional water quality plan; 4) development of a recreational resource plan for the estuary area; 5) restoration of degraded wetlands through propagation of spartina marsh; 6) provide wildlife habitat through beneficial use of dredged material; and 7) provide increased water quality benefits through a cooperative oyster propagation/seeding program. The potential sponsor for the study is the South Carolina Department of Natural Resources. The Feasibility Cost Sharing Agreement is scheduled for completion in July 2002.

Fiscal Year 2000 funds were carried into Fiscal Year 2001 and are being used to complete the reconnaissance phase of the study. The funds requested for Fiscal Year 2002 will be used to initiate the feasibility study. The preliminary estimated cost of the feasibility phase is \$3,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

|                                 |             |
|---------------------------------|-------------|
| Total Estimated Study Cost      | \$3,177,000 |
| Reconnaissance Phase (Federal)  | 177,000     |
| Feasibility Phase (Federal)     | 1,500,000   |
| Feasibility Phase (Non-Federal) | 1,500,000   |

The reconnaissance phase is scheduled for completion in July 2002. The feasibility study schedule is being determined.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Division: South Atlantic

| Study/Project                                              | Total<br>Estimated<br>Federal Cost<br>\$ | Allocation<br>Prior to<br>FY 2001<br>\$ | Allocation<br>FY 2001<br>\$ | Tentative<br>Allocation<br>FY 2002<br>\$ | Additional<br>to Complete<br>After FY 2002<br>\$ |
|------------------------------------------------------------|------------------------------------------|-----------------------------------------|-----------------------------|------------------------------------------|--------------------------------------------------|
| e. Comprehensive Studies                                   |                                          |                                         |                             |                                          |                                                  |
| Georgia                                                    |                                          |                                         |                             |                                          |                                                  |
| Savannah River Basin<br>Comprehensive<br>Savannah District | 2,548,000                                | 625,000                                 | 300,000                     | 230,000                                  | 1,393,000                                        |

The Savannah River Basin encompasses an area of 11,000 square miles in Georgia and South Carolina. Major cities in the basin are Savannah and Augusta, Georgia, and Aiken, South Carolina. Recent studies by the Corps of Engineers, the states of Georgia and South Carolina, and Federal and state agencies have highlighted that there are current water resource problems and needs being encountered in the Savannah River Basin that need to be investigated. Changes in land use below the J. Strom Thurmond, Hartwell and Richard B. Russell reservoirs has prompted the need to reexamine flood control needs in the basin. A review of the quality of habitat below the reservoirs will be conducted to determine restoration measures needed to address adverse impacts on wetlands, and fish and wildlife resources. Continued rapid growth in the basin is increasing pressures to develop new sources of surface water supply in the upper watershed. Pressures are also being felt in the lower watershed since Georgia and South Carolina are now restricting further use of the Floridian Aquifer. The feasibility study is focusing on review of the operation of the major reservoirs in the basin, the need for additional flood control measures, environmental restoration, surface water supply and other allied water resources problems. In addition, the study is reviewing the results of various state and Federal efforts conducted to date to identify problems, needs, and potential alternative plans. Goals and objectives for subsequent planning efforts and planning constraints are being developed in coordination with the states, affected agencies, and local interest groups. The states of Georgia and South Carolina are the local sponsors and are willing to participate in 50-50 cost sharing of feasibility phase studies. The Feasibility Cost Sharing Agreement was signed in June 2000.

The study authorization requires that the study be coordinated with EPA and its ongoing Watershed Study of the basin. Corps efforts have been coordinated with the EPA study through participation on eight policy, management, and resource committees. The Policy committee is currently developing a "Watershed Strategy" to implement priority recommendations. One priority recommendation is the conduct of the Savannah River Basin Comprehensive study. A number of the priority recommendations are dependent upon the comprehensive study for their resolution.

Savannah River Basin  
Comprehensive  
Savannah District  
(continued)

Fiscal Year 2001 funds are being used to continue the feasibility phase of the study. The funds requested for Fiscal Year 2002 will be used to continue the feasibility phase. The preliminary estimated cost of the feasibility phase is \$4,000,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of study cost sharing is as follows:

|                                 |             |
|---------------------------------|-------------|
| Total Estimated Study Cost      | \$4,548,000 |
| Reconnaissance Phase (Federal)  | 548,000     |
| Feasibility Phase (Federal)     | 2,000,000   |
| Feasibility Phase (Non-Federal) | 2,000,000   |

The reconnaissance phase was completed in June 2000. The feasibility study completion date is being determined.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Division: South Atlantic

| Study/Project                            | Total<br>Estimated<br>Federal Cost<br>\$ | Allocation<br>Prior to<br>FY 2001<br>\$ | Allocation<br>FY 2001<br>\$ | Tentative<br>Allocation<br>FY 2002<br>\$ | Additional<br>to Complete<br>After FY 2002<br>\$ |
|------------------------------------------|------------------------------------------|-----------------------------------------|-----------------------------|------------------------------------------|--------------------------------------------------|
| South Carolina                           |                                          |                                         |                             |                                          |                                                  |
| Broad River Basin<br>Charleston District | 1,300,000                                | 0                                       | 100,000                     | 125,000                                  | 1,075,000                                        |

The Broad River Basin (5,420 square miles) is one of the upper four sub-basins in the Santee, Cooper, and Congaree River Basin and includes portions of 18 counties in both North and South Carolina. The Santee, Cooper, and Congaree reconnaissance report completed in May 1997 identified a need for site specific investigations in each sub-basin. The problems and opportunities identified for investigations within the Broad River sub-basin cover a variety of diverse areas. These opportunities include 1) extensive flooding in Greenville and Spartanburg Counties, SC; 2) floodplain delineation's in Greenville, Spartanburg, and Union Counties, SC; 3) riparian ecosystem restoration and greenways for the Enoree River; 4) aquatic and riparian ecosystem restoration for areas upstream from Columbia Diversion Dam and downstream from Parr Reservoir; and 5) anadromous fish passage through the Columbia Diversion Dam. Continued flooding and environmental degradation in these areas warrant investigation and resolution as quickly as possible. In addition to the counties listed above, the South Carolina Department of Natural Resources is a potential sponsor of this study and understands the cost-sharing requirements of the feasibility phase.

Fiscal Year 2001 funds are being used to initiate the reconnaissance phase of the study. The funds requested for Fiscal Year 2002 will be used to complete the reconnaissance phase of the study and initiate the feasibility phase. The preliminary estimated cost of the feasibility phase is \$2,200,000, which is to be shared on a 50-50 percent basis by Federal and non-Federal interests. A summary of the study cost sharing is as follows:

|                                 |             |
|---------------------------------|-------------|
| Total Estimated Study Cost      | \$2,400,000 |
| Reconnaissance Phase (Federal)  | 200,000     |
| Feasibility Phase (Federal)     | 1,100,000   |
| Feasibility Phase (Non-Federal) | 1,100,000   |

The reconnaissance phase is scheduled for completion in December 2001. The feasibility study schedule is being determined.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Division: South Atlantic

| Study/Project                                         | Total<br>Estimated<br>Federal Cost<br>\$ | Allocation<br>Prior to<br>FY 2001<br>\$ | Allocation<br>FY 2001<br>\$ | Tentative<br>Allocation<br>FY 2002<br>\$ | Additional<br>to Complete<br>After FY 2002<br>\$ |
|-------------------------------------------------------|------------------------------------------|-----------------------------------------|-----------------------------|------------------------------------------|--------------------------------------------------|
| f. Review of Authorized Projects                      |                                          |                                         |                             |                                          |                                                  |
| South Carolina                                        |                                          |                                         |                             |                                          |                                                  |
| Atlantic Intracoastal Waterway<br>Charleston District | 4,722,000                                | 1,202,000                               | 633,000                     | 655,000                                  | 2,232,000                                        |

The Atlantic Intracoastal Waterway is a naturally protected navigation route that generally parallels the Atlantic coast between Norfolk, Virginia and the St. John's River in Florida. In South Carolina the project starts near Little River at the North Carolina-South Carolina state line and extends generally south along the coast for a total of 210 miles. The project provides for a waterway 12 feet deep and not less than 90 feet wide and was completed in 1940. This study will investigate existing and future commercial shallow draft navigation needs on a phased approach. The study will review ways to improve safety and navigation efficiency and reduce O&M costs. It will address possible realignment/enlargement of the waterway at specific locations as a result of planned bridges, evaluate the construction of new passing lanes, and evaluate erosion control and/or bank stabilization as related to channel improvement

Activities to be undertaken in Fiscal Year 2001 include aerial photography, bathymetry, soil borings, GIS development, review of commodities, and economic analysis.

Activities to be undertaken in Fiscal Year 2002 include evaluation of real estate requirements, identification of alternatives and preparation of preliminary cost estimates.

The reconnaissance phase was completed in August 1998. The feasibility study schedule is being determined

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Division: South Atlantic

| Study/Project                                          | Total<br>Estimated<br>Federal Cost<br>\$ | Allocation<br>Prior to<br>FY 2001<br>\$ | Allocation<br>FY 2001<br>\$ | Tentative<br>Allocation<br>FY 2002<br>\$ | Additional<br>to Complete<br>After FY 2002<br>\$ |
|--------------------------------------------------------|------------------------------------------|-----------------------------------------|-----------------------------|------------------------------------------|--------------------------------------------------|
| 2. PRECONSTRUCTION ENGINEERING AND DESIGN (PED)        |                                          |                                         |                             |                                          |                                                  |
| a. Watershed/Ecosystem                                 |                                          |                                         |                             |                                          |                                                  |
| South Carolina                                         |                                          |                                         |                             |                                          |                                                  |
| Yadkin-Pee Dee Rivers Watershed<br>Charleston District | 1,238,000                                | 0                                       | 0                           | 50,000                                   | 1,188,000                                        |

The Pee Dee River Basin, the second largest basin draining to the South Atlantic Coast, extends northwest from the coast at Georgetown, across the North Carolina state line into western North Carolina, with a small portion into Virginia. The basin drainage area is about 18,000 square miles. A change in natural flow regime, caused by the construction of several hydropower dams in North Carolina, has negatively impacted the fish and wildlife habitat, in the lower portion of the basin along the Pee Dee River. The feasibility study is evaluating an array of alternatives to include reevaluation of the minimum flow requirements of the dams, however, the alternatives being evaluated may also provide additional benefits such as water supply, flood control, and recreation. The feasibility study is scheduled for completion in September 2001. The South Carolina Department of Natural Resources is the local sponsor.

PED will ultimately be cost shared at the rate of the project to be constructed, but will be financed through the PED period at 25% non-Federal. Any adjustments that may be necessary to bring the non-Federal contribution in line with the project cost sharing will be accomplished in the first year of construction.

|                                                                 |             |                                                                 |             |
|-----------------------------------------------------------------|-------------|-----------------------------------------------------------------|-------------|
| Total Estimated Preconstruction<br>Engineering and Design Costs | \$1,650,000 | Total Estimated Preconstruction<br>Engineering and Design Costs | \$1,650,000 |
| Initial Federal Share                                           | 1,238,000   | Ultimate Federal Share                                          | 1,073,000   |
| Initial Non-Federal Share                                       | 412,000     | Ultimate Non-Federal Share                                      | 577,000     |

Fiscal Year 2000 funds were carried into Fiscal Year 2001 and are being used to complete the feasibility study. Fiscal Year 2002 funds will be used to initiate preconstruction, engineering, and design activities. The PED study schedule is being determined.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Division: South Atlantic

| Study/Project                                   | Total<br>Estimated<br>Federal Cost<br>\$ | Allocation<br>Prior to<br>FY 2001<br>\$ | Allocation<br>FY 2001<br>\$ | Tentative<br>Allocation<br>FY 2002<br>\$ | Additional<br>to Complete<br>After FY 2002<br>\$ |
|-------------------------------------------------|------------------------------------------|-----------------------------------------|-----------------------------|------------------------------------------|--------------------------------------------------|
| b. Navigation                                   |                                          |                                         |                             |                                          |                                                  |
| Florida                                         |                                          |                                         |                             |                                          |                                                  |
| Port Everglades Harbor<br>Jacksonville District | 450,000                                  | 0                                       | 0                           | 300,000                                  | 150,000                                          |

Port Everglades Harbor is located on the east coast of Florida about 25 miles north of Miami and 325 Miles south of Jacksonville. Port Everglades is the deepest harbor south of Norfolk, Virginia and one of the fastest growing container ports in the U.S. Currently, Port Everglades is the seventh largest container port on the east coast. Harbor pilots are required to restrict usage of the larger more efficient container vessel fleet due to maneuver and turning restraints. The feasibility report is scheduled for completion in January 2000. The project is estimated to cost \$10 million with an estimated Federal cost of \$6.5 million and an estimated non-Federal cost of \$3.5 million. The benefit-cost ratio is 1.2 to 1 based upon the 905B Analysis dated March 1997. The local sponsor is Broward County, Port Everglades Department. The PED cost sharing agreement is scheduled for completion in January 2002. PED will ultimately be cost shared at the rate for the project to be constructed but will be financed through the PED period at 25% non-Federal. Any adjustments that may be necessary to bring the non-Federal contribution in line with the project cost sharing will be accomplished in the first year of construction.

|                                                                 |            |                                                                 |            |
|-----------------------------------------------------------------|------------|-----------------------------------------------------------------|------------|
| Total Estimated Preconstruction<br>Engineering and Design Costs | \$ 600,000 | Total Estimated Preconstruction<br>Engineering and Design Costs | \$ 600,000 |
| Initial Federal Share                                           | 450,000    | Ultimate Federal Share                                          | 390,000    |
| Initial Non-Federal Share                                       | 150,000    | Ultimate Non-Federal Share                                      | 210,000    |

Fiscal Year 2002 funds will be used to initiate PED and completion date is being determined.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Division: South Atlantic

| Study/Project                                  | Total<br>Estimated<br>Federal Cost<br>\$ | Allocation<br>Prior to<br>FY 2001<br>\$ | Allocation<br>FY 2001<br>\$ | Tentative<br>Allocation<br>FY 2002<br>\$ | Additional<br>to Complete<br>After FY 2002<br>\$ |
|------------------------------------------------|------------------------------------------|-----------------------------------------|-----------------------------|------------------------------------------|--------------------------------------------------|
| Georgia                                        |                                          |                                         |                             |                                          |                                                  |
| Savannah Harbor Expansion<br>Savannah District | 17,465,000                               | 290,000                                 | 125,000                     | 400,000                                  | 16,650,000                                       |

The Savannah Harbor area includes the lower 21.3 miles of the Savannah River, which is the principal boundary between the states of Georgia and South Carolina. The city of Savannah is located about 18 miles from the river mouth. Results of the South Atlantic Cargo Traffic Container Study indicate the current 1.9 million tonnage equivalent units (TEU) through South Atlantic Ports is projected to exceed 13 million TEU by the year 2050; this volume is greater than today's total U.S. containerized trade. With this growth, the capacity of the port of Savannah container cargo facilities is expected to be exceeded by 2005. GPA conducted the Feasibility Study under the authority of Section 203 of the Water Resources Development Act of 1986 (WRDA 86) and was responsible for funding all associated Feasibility Study costs. The Feasibility Report was submitted to the Secretary of the Army in August 1998. The project, authorized in WRDA 99, is estimated to cost \$244,079,730, with an estimated Federal cost of \$143,830,300 and an estimated non-Federal cost of \$100,249,430 includes deepening the harbor channel from 42 feet up to 48 feet. The average annual benefits amount to \$35.2 million, all for commercial navigation. The benefit-cost ratio is 3.0 to 1 at 7-1/8 percent based on the latest economic analysis dated August 1998. The Georgia Ports Authority (GPA) is the sponsor and is aware of project cost sharing requirements. PED may ultimately be cost shared under the authority of Section 204 of WRDA 86 (at the rate for the project to be constructed), but will be financed through the PED period at 86 percent non-Federal and 14 percent Federal. Upon completion of construction, credit will be given to the local sponsor for the Federal share of the PED cost.

|                                                                 |              |                                                                 |              |
|-----------------------------------------------------------------|--------------|-----------------------------------------------------------------|--------------|
| Total Estimated Preconstruction<br>Engineering and Design Costs | \$23,286,000 | Total Estimated Preconstruction<br>Engineering and Design Costs | \$23,286,000 |
| Initial Federal Share                                           | 3,323,000    | Ultimate Federal Share                                          | 17,465,000   |
| Initial Non-Federal Share                                       | 19,963,000   | Ultimate Non-Federal Share                                      | 5,821,000    |

In accordance with the cost sharing and financing concepts reflected in WRDA 86, non-Federal interests will be required to provide lands, easements, rights of way, and dredged material disposal areas; modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary, for the construction of the project; pay 25 percent of the cost of construction of the portion of the project which has a depth in excess of 20 feet but not in excess of 45 feet; pay 50 percent



Savannah Harbor Expansion  
Savannah District  
(continued)

of the cost of construction of the portion of the project which has a depth in excess of 45 feet; and reimburse an additional 10 percent of the cost of general navigation features allocated to commercial navigation within a period of 30 years following completion of construction, as partially reduced by a credit allowed for the value of lands, easements, rights of way, relocations, and dredged material disposal areas provided for commercial navigation.

Fiscal Year 2001 funds are being used to continue Federal oversight and participation in a Stakeholders Evaluation Group (SEG) and begin the development of the Tier II Environmental Impact Statement (EIS). GPA is seeking to develop a consensus, incorporating input from local government, resource agencies, non-governmental organizations (NGO) and the Federal government on the optimum project scope, not exceeding 48 feet deep. Fiscal Year 2002 funds will be used to continue Federal oversight and Tier II EIS development. Scheduled completion date for the Tier II EIS and GRR is to be determined.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Division: South Atlantic

| Study/Project                                                        | Total<br>Estimated<br>Federal Cost<br>\$ | Allocation<br>Prior to<br>FY 2001<br>\$ | Allocation<br>FY 2001<br>\$ | Tentative<br>Allocation<br>FY 2002<br>\$ | Additional<br>to Complete<br>After FY 2002<br>\$ |
|----------------------------------------------------------------------|------------------------------------------|-----------------------------------------|-----------------------------|------------------------------------------|--------------------------------------------------|
| c. Beach Erosion Control                                             |                                          |                                         |                             |                                          |                                                  |
| North Carolina                                                       |                                          |                                         |                             |                                          |                                                  |
| Dare County Beaches<br>(Bodie Island Portion)<br>Wilmington District | 2,600,000                                | 0                                       | 300,000                     | 500,000                                  | 1,800,000                                        |

Bodie Island is located on the northern coast of North Carolina about 40 miles south of the North Carolina-Virginia state line in Dare County. Damaging nor'easter storms occur annually, generally in late winter or early spring. Two severe storms damaged the area in the fall 1992, destroying the beach and dunes and leaving the area more vulnerable to storm attack. Damages in the study area totaled over \$4 million. During the 1999 hurricane season, Hurricane Dennis damaged 739 structures, destroyed or severely damaged 66 structures and caused damages totaling over \$5.8 million. A feasibility report was completed in Dec 2000. The plan of improvement, estimated to cost \$ 654,000,000 with an estimated Federal cost of \$250,402,000 and an estimated non-Federal cost of \$403,598,000, consists of a 50-foot wide berm to be constructed at elevation 13 feet NGVD along two separate segments of shoreline starting at Kitty Hawk and ending at Nags Head. Total length of these two segments is about 14 miles. The average annual benefits amount to \$35,402,000, for hurricane and storm damage reduction and recreation. The benefit-cost ratio is 1.27 to 1 based upon the latest economic analysis dated May 2000. The project sponsor, Dare County, supports the project as evidenced by their execution of the FCSA in May 1994, is ready to sign the PED cost-sharing agreement. PED will ultimately be cost shared at the rate for the project to be constructed but will be financed through the PED period at 25 percent non-Federal. Any adjustment that may be necessary to bring the non-Federal contribution in line with the project cost sharing will be accomplished in the first year of construction.

|                                                                 |             |                                                                 |             |
|-----------------------------------------------------------------|-------------|-----------------------------------------------------------------|-------------|
| Total Estimated Preconstruction<br>Engineering and Design Costs | \$3,470,000 | Total Estimated Preconstruction<br>Engineering and Design Costs | \$3,470,000 |
| Initial Federal Share                                           | 2,600,000   | Ultimate Federal Share                                          | 2,255,000   |
| Initial Non-Federal Share                                       | 870,000     | Ultimate Non-Federal Share                                      | 1,215,000   |

The project was authorized for construction in the Water Resources Development Act of 2000. In accordance with changed cost sharing and financing requirements, the non-Federal sponsor must provide all lands, easements and rights of way, including suitable borrow and spoil disposal areas presently estimated at \$5,379,000; pay 35 percent of the first costs and 65% of future nourishment costs allocated to hurricane and storm damage reduction presently estimated at \$19,707,000 and \$378,512,000 respectively, and bear all costs of operation, maintenance, and replacement of hurricane storm damage reduction facilities. Fiscal Year 2001 will be used to initiate the PED phase. Fiscal Year 2002 funds will be used to continue PED, including plans and specifications for the initial cycle and a PED cost sharing agreement. PED completion is being determined.

APPROPRIATION TITLE: General Investigations, Fiscal Year 2002

Division: South Atlantic

| Study/Project                         | Total<br>Estimated<br>Federal Cost<br>\$ | Allocation<br>Prior to<br>FY 2001<br>\$ | Allocation<br>FY 2001<br>\$ | Tentative<br>Allocation<br>FY 2002<br>\$ | Additional<br>to Complete<br>After FY 2002<br>\$ |
|---------------------------------------|------------------------------------------|-----------------------------------------|-----------------------------|------------------------------------------|--------------------------------------------------|
| South Carolina                        |                                          |                                         |                             |                                          |                                                  |
| Pawleys Island<br>Charleston District | 225,000                                  | 0                                       | 0                           | 25,000                                   | 200,000                                          |

Pawleys Island is a 3.5 mile long barrier island located approximately 22 miles southwest of Myrtle Beach and 13 miles northeast of Georgetown, South Carolina. Prior storm events have resulted in breaches of the main access road and damages to electric, water, and sewage lines. There are no hotels located within the proposed Federal project, only residential homes. The proposed project consists of construction of a protective sand berm placed to an approximate elevation of +8.0 feet MSL with a beach front slope of approximately 15 horizontal to 1 vertical to protect the island's residences and infrastructure from storm damages due to hurricanes and northeasters. The estimated initial project construction cost is \$10.4 million, with an estimated Federal cost of \$4.3 million, and an estimated non-Federal cost of \$6.1 million based upon the sponsor funding approximately one mile of the central portion of the island themselves. The Town of Pawleys Island is the local sponsor. They understand the requirements of the PED cost sharing agreement and are willing to have funds available to finance the PED portion of the project. PED will ultimately be cost shared at the rate of the project to be constructed but will be financed through the PED period at 25% non-Federal. Any adjustments that may be necessary to bring the non-Federal contribution in line with the project cost sharing will be accomplished in the first year of construction.

|                                 |           |                                 |           |
|---------------------------------|-----------|---------------------------------|-----------|
| Total Estimated Preconstruction |           | Total Estimated Preconstruction |           |
| Engineering and Design Costs    | \$300,000 | Engineering and Design Costs    | \$300,000 |
| Initial Federal Share           | 225,000   | Ultimate Federal Share          | 195,000   |
| Initial Non-Federal Share       | 75,000    | Ultimate Non-Federal Share      | 105,000   |

Fiscal Year 2001 funds are being used to continue the feasibility study. Fiscal Year 2002 funds will be used to complete the feasibility study, which is scheduled for completion in June 2002, and initiate preconstruction, engineering, and design activities. The PED study schedule is being determined.

APPROPRIATION: Construction, General - Channels and Harbors (Navigation)

PROJECT: Mobile Harbor, Alabama (Navigation), (Continuing)

LOCATION: The project is located in southwest Alabama and extends from the Gulf of Mexico through Mobile Bay to the mouth of Mobile River at the City of Mobile, Alabama, a distance of approximately 39.0 miles. Mobile Harbor is located in Mobile County, AL, approximately 150 miles east of New Orleans, LA, and 60 miles west of Pensacola, FL.

DESCRIPTION: The existing project also known as Phase I improvements completed in May 1990 provides for a 47 by 600 foot entrance channel for a distance of 6.1 miles, and a bay channel 45 by 400 feet from the mouth of the bay north for a distance of 31.2 miles to the McDuffie Coal terminal.

Phase I – 1300' Channel Extension, completed in May 2000 extended the 45-foot by 400-foot navigation channel approximately 1300 linear feet to the north of its present position.

Phase I – 2100' Channel Extension, will extend the 45-foot by 400-foot navigation channel approximately 2100 linear feet to the north of the 1300' extension.

Authorized channel improvements known as Phase II (Remainder) provide for future development to deepen and widen entrance channel over the bar to 57 feet by 700 feet about 7.4 miles long, deepen and widen bay channel to 55 feet by 550 feet about 27.0 miles long, deepen and widen an additional 3.6 miles of bay channel to 55 feet by 650 feet and provide 55 foot deep anchorage area and turning basin in vicinity of Little Sand Island.

AUTHORIZATION: Supplemental Appropriations Act of 1985 and the Water Resources Development Act of 1986.

REMAINING BENEFIT-REMAINING COST RATIO: 2.1 to 1 at 6 5/8 percent for 2100-ft. extension; 1.5 to 1 at 7 1/8 percent for remainder.

TOTAL BENEFIT-COST RATIO: 2.8 to 1 at 8 1/8 percent for Phase I; 5.5 to 1 at 7 3/8 percent for Phase I 1300-ft Extension; 2.1 to 1 @ 6 5/8 percent for Phase I 2100-ft Extension; 1.5 to 1 at 7 1/8 percent for Remainder.

INITIAL BENEFIT-COST RATIO: 2.8 to 1 at 8 1/8 percent for Phase I (FY 1985); 5.5 to 1 at 7 3/8 percent for Phase I 1300-ft. Extension (FY 1999); 2.1 to 1 @ 6 5/8 percent for Phase I 2100-ft Extension; 1.5 to 1 at 7 1/8 percent for Remainder (FY 2000).

# BASIS OF BENEFIT-COST RATIO:

Phase I - Benefits are from the General Design Memorandum dated August 1984 at October 1984 price levels.

Phase I 1300-ft. Extension - Benefits are from the Limited Reevaluation Report prepared in May 1997 at October 1997 price levels.

Phase I 2100-ft Extension - Benefits are from the Limited Reevaluation Report prepared in July 2000 at October 2000 price levels.

Phase II (Remainder) - Benefits are from the General Design Memorandum dated August 1984 at October 1984 price levels.

## SUMMARIZED FINANCIAL DATA

|                                            |               |                                                                                                                                                                                              |              | ACCUM.<br>PCT. OF FED<br>FED. COST |
|--------------------------------------------|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|------------------------------------|
| Estimated Appropriation Requirement (COE)  | \$326,605,000 | Allocations to 30 September 2000                                                                                                                                                             | \$29,729,000 |                                    |
| Estimated Appropriation Requirement (USCG) | 4,297,000     | Conference Allowance of FY 2001                                                                                                                                                              | 499,000      |                                    |
| Estimated Total Appropriation Requirement  | 330,902,000   |                                                                                                                                                                                              | 268,000      |                                    |
| Future Non-Federal Reimbursement           | 58,462,000    | Allocation for FY 2001                                                                                                                                                                       | 29,997,000   | 1/                                 |
| Estimated Federal Cost (Ultimate)(COE)     | 268,153,000   | Allocation through FY 2001                                                                                                                                                                   | 2,300,000    | 9                                  |
| Estimated Non-Federal Cost                 | 325,550,000   | Allocation Requested for FY 2002                                                                                                                                                             | 294,308,000  | 10                                 |
| Cash Contributions                         | \$257,904,000 | Programmed Balance to Complete after FY 2002                                                                                                                                                 | 0            |                                    |
| Other Costs                                | 9,194,000     | Unprogrammed Balance to Complete after FY 2002                                                                                                                                               |              |                                    |
| Reimbursements                             | 58,452,000    |                                                                                                                                                                                              |              |                                    |
| Phase I                                    | \$ 3,772,000  | 1/ Reflects \$80,000 reduction assigned as savings and slippage, \$150,000 reprogrammed from the project and \$1,000 rescinded in accordance with the Consolidated Appropriations Act, 2001. |              |                                    |
| Phase I (1300' Ext.)                       | 81,000        |                                                                                                                                                                                              |              |                                    |
| Phase I (2100' Est.)                       | 244,000       |                                                                                                                                                                                              |              |                                    |
| Phase II (Remainder)                       | 54,355,000    |                                                                                                                                                                                              |              |                                    |
| Total Estimated Project Cost               | 598,000,000   |                                                                                                                                                                                              |              |                                    |

|  |  | STATUS: (1 Jan 2001)      | PERCENT<br>COMPLETE | PHYSICAL<br>COMPLETION<br>SCHEDULE |
|--|--|---------------------------|---------------------|------------------------------------|
|  |  | Phase I – Deepening       | 100                 | Sep 1994                           |
|  |  | Phase I – 1300' Extension | 100                 | May 2000                           |
|  |  | Phase I – 2100" Extension | 0                   | Being determined                   |
|  |  | Remainder – Balance       | 0                   | Being determined                   |
|  |  | Entire Project            | 9                   | Being determined                   |

Division: South Atlantic

District: Mobile

Mobile Harbor , AL

3 April 2001

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#### PHYSICAL DATA:

Phase I (Complete) – Deepen entrance channel to 47 by 600 feet and deepen bay channel to 45 by 400 feet for a total distance of 37.3 miles.

Phase I (1300' Extension)(Complete) - extend 45 foot channel approximately 1,300 linear feet to the north of present location.

Phase I (2100' Extension) – extend 45-foot channel approximately 2,100 linear feet to the north of previous 1300' extension.

Phase II (Remainder) - deepen entrance channel from 47 by 600 to 57 by 700 feet and deepen bay channel from 45 by 400 to 55 by 550 feet.

#### JUSTIFICATION:

Phase I (1300' Extension) - Officials of the Alabama State Docks requested that the 45-foot deep channel section be extended northward of McDuffie Island to accommodate ships of 900 feet in length, with beams of 140 feet, which require a 45-foot channel depth. This request reflects a desire to import iron ore and other dry, bulk materials such as limestone and coal to McDuffie Island and to industries located above McDuffie Island. In FY 1994, 45,000,000 tons of cargo passed through the port. Of this number over 14,000,000 tons were comprised of coal and lignite. Cost savings of \$0.44 per ton will be realized with the completion of the channel extension. Average annual benefits to the navigation project are \$578,800.

Phase I (2100' Extension) - Officials of the Alabama State Docks requested that the 45-foot deep channel section be extended northward of the 1300' extension to facilitate additional industries utilizing the larger ore and cargo ships now calling at other ports. Average annual costs, amortized over the project life of 50-years, are \$150,542. Average annual benefits are \$336,875.

Phase II (Remainder) - Mobile Harbor is a leading harbor on the Gulf Coast, particularly with regard to coal shipments. Waterborne commerce for 1986 was a record 51 million tons. Presently, coal shipments average 14 million tons per year. Channel deepening and navigational improvement features are required to provide a safe and efficient harbor for the large coal vessels calling at the Port of Mobile. The capacity of the McDuffie Coal Handling Terminal is 25 million tons annually. U.S. Department of Energy's "Energy Information Administration's Coal Transport Model" suggest growth in coal shipments through the Port of Mobile over the next 20 years, from 14 to 19 million tons annually. Vessels that can economically utilize the existing Federal 45-foot channel have a carrying capacity of about 45,000 to 50,000 deadweight tons. With a 55-foot channel, vessels with carrying capacities of 145,000 to 150,000 deadweight tons can be economically utilized. This increase in carrying capacity results in a corresponding increase in economies of scale and savings in transportation costs. Transportation savings on coal exported to Europe of \$5 to \$6 per ton would be realized by using the larger vessels. Coal shipped to Japan in the larger vessels would realize a savings of about \$16 per ton. Iron ore imported from Canada and Brazil could also be shipped more economically at savings of about \$3 and \$5.25 per ton, respectively. The average annual benefits are \$133,484,000.

FISCAL YEAR 2002: The requested amount will be applied as follows.

|                                                              |             |
|--------------------------------------------------------------|-------------|
| Construction, 2100 linear foot extension                     | \$1,630,000 |
| Continue Planning, Engineering & Design Phase II (Remainder) | 670,000     |
| Total                                                        | 2,300,000   |

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the Non-Federal sponsor must comply with the requirements listed below:

|                                                                                                                                                                                            | Payments<br>During<br>Construction<br>and<br>Reimbursements | Annual<br>Operation,<br>Maintenance,<br>and<br>Replacement<br>Costs |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------------|
| Requirements of Local Cooperation                                                                                                                                                          |                                                             |                                                                     |
| PHASE I                                                                                                                                                                                    |                                                             |                                                                     |
| Pay 25 percent of the costs allocated to general navigation facilities during construction.                                                                                                | \$9,430,000                                                 | 0                                                                   |
| Reimbursement of an additional 10 percent of the costs of general navigation features allocated to Commercial navigation within a period of 30 years following completion of construction. | 3,772,000                                                   | 0                                                                   |
| PHASE I (1300-ft EXTENSION)                                                                                                                                                                |                                                             |                                                                     |
| Pay 25 percent of the costs allocated to general navigation facilities during construction.                                                                                                | 201,000                                                     | 0                                                                   |
| Reimbursement of an additional 10 percent of the costs of general navigation features allocated to commercial navigation within a period of 30 years following completion of construction. | 81,000                                                      | 0                                                                   |

NON-FEDERAL COST (Continued):

|                                                                                                                                                                                             | Payments<br>During<br>Construction<br>and<br>Reimbursements | Annual,<br>Operation,<br>Maintenance,<br>And<br>Replacement<br>Costs |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|----------------------------------------------------------------------|
| PHASE I (2100' EXTENSION)                                                                                                                                                                   |                                                             |                                                                      |
| Pay 25 percent of the costs allocated to general navigation facilities during construction.                                                                                                 | \$609,000                                                   | 0                                                                    |
| Reimbursements of an additional 10 percent of the costs of general navigation features allocated To commercial navigation within a period of 30 years following completion of construction. | 244,000                                                     | 0                                                                    |
| PHASE II (REMAINDER)                                                                                                                                                                        |                                                             |                                                                      |
| Pay 25 percent of the costs allocated to general navigation facilities to a depth of 45 feet below mean low water.                                                                          | \$ 24,108,000                                               | 0                                                                    |
| Pay 50 percent of the costs allocated to general navigation facilities to a depth greater than 45 feet below mean low water.                                                                | 223,556,000                                                 | 0                                                                    |
| Pay 50 percent of costs of incremental maintenance greater than 45 feet below mean low water.                                                                                               | 0                                                           | 1,300,000                                                            |
| Pay 100 percent of the costs allocated to berthing areas and mooring facilities (without credit).                                                                                           | 9,194,000                                                   | 0                                                                    |
| Reimbursement of an additional 10 percent of the costs of general navigation features allocated to Commercial navigation within a period of 30 years following completion of construction.  | 54,355,000                                                  | 0                                                                    |
| Total Non-Federal Costs                                                                                                                                                                     | 325,550,000                                                 | 1,300,000                                                            |



STATUS OF LOCAL COOPERATION: The Project Cooperation Agreement (PCA) for the Phase I Extension was executed on October 1, 1999. By letter dated May 29, 1998, the non-Federal sponsor, the Alabama State Docks, expressed their desire to proceed with implementation of the remainder of the authorized project. The sponsor understands the cost sharing requirements as identified in Water Resource Development Act of 1986.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal (COE) cost estimate of \$ 326,605,000 at October 2000 price levels reflects a decrease of \$4,416,000 from the last estimate of \$ 331,021,000 presented to Congress in FY 2001. This change includes the following items:

| Item                                      | Amount       |
|-------------------------------------------|--------------|
| Price Escalation on Construction Features | -\$4,416,000 |
| Total                                     | -\$4,416,000 |

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: In accordance with the requirements of the National Environmental Policy Act (NEPA), the Final Environmental Impact Statement (FEIS), Mobile Harbor Channel Improvements, Mobile County, Alabama was filed with the Environmental Protection Agency(EPA)on May 22, 1981. The proposed action evaluated in this FEIS included the deepening of the main navigation channel to a depth of 55 feet at a width of 550 feet. The FEIS also documented the impacts associated with the disposal of about 141.2 million cubic yards of new work dredged material and all future maintenance material for the economic life of the project. A supplement to the FEIS, Final Environmental Impact Statement, Mobile Harbor, Alabama, Channel Improvements, Offshore Dredged Material Disposal was filed with the EPA on December 13, 1985. The Record of Decision (ROD) to designate two offshore disposal sites, Mobile-north and Mobile-south, for dredged material disposal was signed by the Division Engineer, South Atlantic Division, on May 13, 1986. This supplement to the FEIS evaluated the specific impacts of designation of two areas within the Gulf of Mexico for the purpose of receiving dredged material of suitable quality from the Mobile Harbor project and other navigation projects within the Mobile Harbor area. The FEIS, Supplement to the FEIS, and ROD were fully coordinated with the public and State and Federal agencies. The commenting agencies concurred with the recommended alternative as described in the FEIS and Supplement.

An Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) for the Phase I, 1300' extension were completed in April 1997. A second EA/FONSI for the Phase I, 2100' extension were prepared in June, 1999.

OTHER INFORMATION: Funds to initiate Preconstruction, Engineering and Design were appropriated in Fiscal Year 1982 and funds to initiate construction were appropriated in Fiscal Year 1985.

Summarized Financial Data for PHASE I (2100' EXTENSION)

|                                           |              |
|-------------------------------------------|--------------|
| Estimated Total Appropriation Requirement | \$ 1,828,000 |
| Future Non-Federal Reimbursement          | 244,000      |
| Estimate Federal Cost (Ultimate)(COE)     | 1,584,000    |
| Estimated Non-Federal Cost:               | 853,000      |
| Cash Contributions                        | \$609,000    |
| Reimbursements                            | 244,000      |

Total Estimated Project Cost 2,437,000

Remaining Benefit-Remaining Cost Ratio: 2.1 to 1 at 6 5/8 percent.

Total Benefit-Cost Ratio: 2.1 to 1 at 6 5/8 percent.

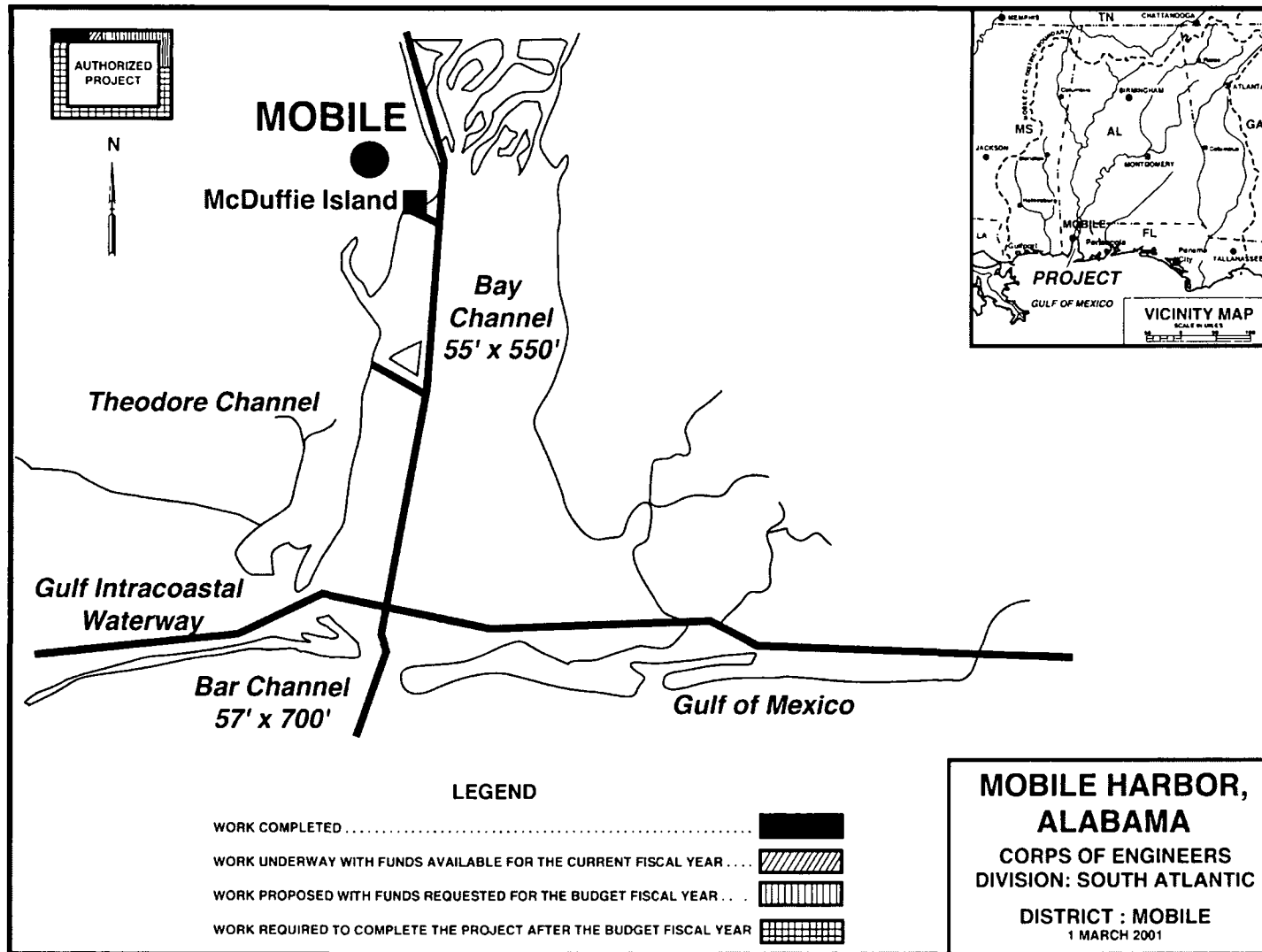
Summarized Financial Data for PHASE II (REMAINDER)

|                                             |               |
|---------------------------------------------|---------------|
| Estimated Appropriation Requirements (COE)  | \$295,882,000 |
| Estimated Appropriation Requirements (USCG) | 4,297,000     |
| Estimated Total Appropriation Requirements  | 300,179,000   |
| Future Non-Federal Reimbursement            | 54,355,000    |
| Estimated Federal Cost (Ultimate)(COE)      | 241,527,000   |
| Estimated Non-Federal Cost:                 | 311,213,000   |
| Cash Contributions                          | \$247,664,000 |
| Other Costs                                 | 9,194,000     |
| Reimbursements                              | 54,355,000    |

Total Estimated Project Cost \$557,037,000

Remaining Benefit-Remaining Cost Ratio: 1.5 to 1 at 7 1/8 percent.

Total Benefit-Cost Ratio: 1.5 to 1 at 7 1/8 percent.



APPROPRIATION TITLE: Construction, General - Navigation

PROJECT: Canaveral Harbor, Florida (Continuing)

LOCATION: Canaveral Harbor is located in Brevard County on the shore of Cape Canaveral in an area known as Canaveral Bight.

DESCRIPTION: The project provides for a 44-foot entrance channel, 35-foot turning basin, 12-foot barge channel, 400 foot lock, a sand bypassing system, and south jetty extension of 500 feet.

AUTHORIZATION: The present project is in Senate Document No. 140, 87<sup>th</sup> Congress, 2<sup>nd</sup> Session and was authorized by the Rivers and Harbor Act of 23 October 1962 (Public Law 87-874).

REMAINING BENEFIT-REMAINING COST RATIO: 1.7 to 1 at 6 5/8 percent.

TOTAL BENEFIT-COST RATIO: 1.7 to 1 at 6 5/8 percent.

INITIAL BENEFIT-COST RATIO: 1.7 to 1 at 6 5/8 percent (FY1964)

BASIS OF BENEFIT-COST RATIO: Benefits are included in the Canaveral Harbor, Florida General Reevaluation Report completed in December 1992 at November 1992 price level.

| SUMMARIZED FINANCIAL DATA                      |               | ACCUM<br>PCT OF<br>EST. FED<br>COST | STATUS<br>(1 January 2001)                     | PCT<br>COMPL | PHYSICAL<br>COMPLETION<br>SCHEDULE |
|------------------------------------------------|---------------|-------------------------------------|------------------------------------------------|--------------|------------------------------------|
| Estimated Federal Cost                         | \$133,740,000 |                                     | Locks                                          | 100          | Mar 1966                           |
| Estimated Non-Federal Cost                     | 4,960,000     |                                     | Channels & Canals                              |              |                                    |
| Cash Contributions                             | \$ 408,000    |                                     | Barge Canal                                    | 100          | Aug 1965                           |
| Other Costs                                    | 4,552,000     |                                     | Harbor Ext. Mi 1.2<br>To Mi 1.5                | 100          | Sep 1974                           |
| Total Estimated Project Cost                   | 138,700,000   |                                     | Harbor Ext. Mi 1.5 to Mi 2.3<br>and Mitigation | 100          | Jun 1992                           |
| Allocations to September 2000                  | 34,369,000    |                                     | Breakwaters and Seawalls                       |              |                                    |
| Conference Allowance for FY 2001               | 845,000       |                                     | Jetty Extension                                | 46           | Being Determined                   |
| Allocation for FY 2001                         | 1,509,000     | 1/                                  | Beach Replenishment                            | 12           | Being Determined                   |
| Allocation through FY 2001                     | 35,878,000    | 27%                                 | Sand Transfer System                           |              |                                    |
| Allocation Requested for FY 2002               | 5,701,000     | 31%                                 | Entire Project                                 | 26           | Being Determined                   |
| Programmed Balance to Complete After FY 2002   | 92,161,000    |                                     |                                                |              |                                    |
| Unprogrammed Balance to Complete After FY 2002 | 0             |                                     |                                                |              |                                    |

1/ Reflects \$136,000 reduction assigned as savings and slippage, \$800,000 reprogrammed to the project and \$2,000 rescinded in accordance with the Consolidated Appropriations Act, 2001..

# PHYSICAL DATA

|                      |                 |
|----------------------|-----------------|
| Entrance Channel     | 35-foot Depth   |
| Turning Basin        | 44-foot Depth   |
| Barge Channel        | 12-foot Depth   |
| Lock                 | 400-foot Length |
| Jetty Extension      | 500 Feet        |
| Sand Transfer System |                 |

JUSTIFICATION: Development and operation of the Rocket-Launching Facility on Cape Kennedy and the development of Patrick Air Force Base, 10 miles south of Canaveral Harbor, and tracking stations on islands offshore have resulted in a population increase in the tributary area from 162,000 in 1940 to about 570,000 in 1980. During the 1960's, there was a major expansion of the Rocket-Launching Facility on Cape Kennedy to accommodate the space program. Commerce for the harbor was 2,175,000 tons in 1987.

The mitigation project completed the western harbor extension. The sand transfer system would reduce the required maintenance dredging of the Canaveral Harbor navigation project by approximately 106,000 cubic yards on an annual basis. In addition, material placed on the beach by the sand transfer system will prevent the loss of 136,000 square feet over a length of 2.8 miles due to erosion. Average annual benefits are:

| Annual Benefits               | Amount         |
|-------------------------------|----------------|
| Reduction of Maintenance      | \$ 599,000     |
| Storm Damage Prevention       | 818,000        |
| Loss of Land                  | <u>534,000</u> |
| Total Average Annual Benefits | 1,951,000      |

FISCAL YEAR 2002: The requested amount will be applied as follows:

|                                                |                |
|------------------------------------------------|----------------|
| Initiate North Jetty Permanent Sand Tightening | \$ 96,000      |
| Initiate and Complete Sand Bypass              | 4,345,000      |
| Continue South Jetty Extension                 | 356,000        |
| Planning, Engineering, and Design              | 242,000        |
| Construction Management                        | <u>662,000</u> |
| Total                                          | 5,701,000      |

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

| Requirements of Local Cooperation                                                  | Payments During Construction<br>and Reimbursements | Annual Operation, Maintenance Repair,<br>Rehabilitation, and Replacement Costs |
|------------------------------------------------------------------------------------|----------------------------------------------------|--------------------------------------------------------------------------------|
| Provide 1.4 percent of the costs allocated to deepening of the West Turning Basin. | \$ 408,000                                         | 0                                                                              |
| Provide lands, easements, rights of way, and dredged material disposal areas.      | <u>4,552,000</u>                                   | 0                                                                              |
| Total Non-Federal First Cost                                                       | 4,960,000                                          | 0                                                                              |

STATUS OF LOCAL COOPERATION: The local sponsor is the Canaveral Port Authority. A Project Cooperation Agreement was executed in March 1994.

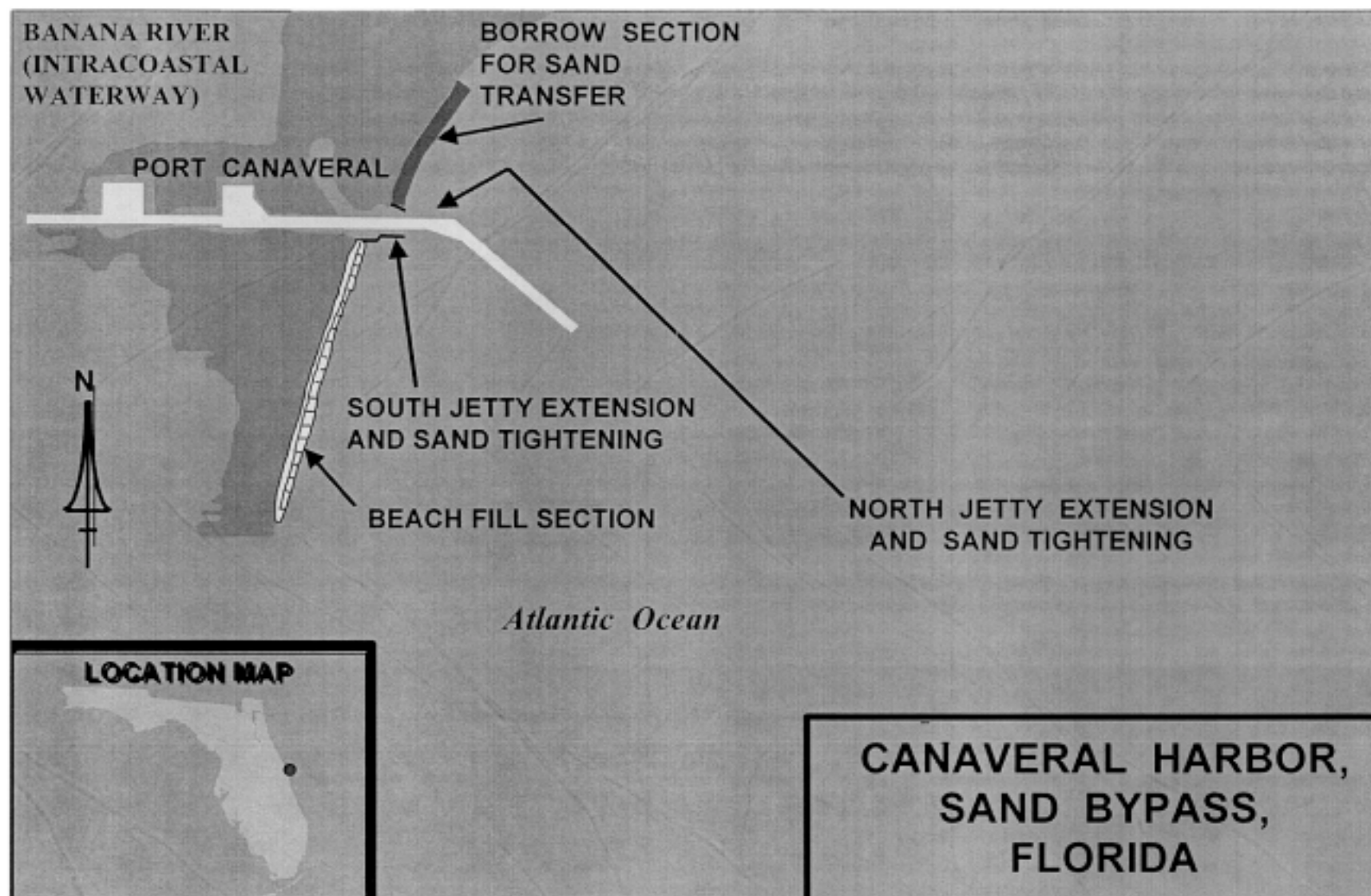
COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$133,740,000 is a decrease of \$10,000 from the latest estimate (\$133,750,000) presented to Congress (FY 2000). This change includes the following:

| Item                                      | Amount             |
|-------------------------------------------|--------------------|
| Price Escalation on Construction Features | <u>- \$ 10,000</u> |
| Total                                     | -\$ 10,000         |

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An Environmental Assessment with a Finding of No Significant Impact was completed in May 1993.

OTHER INFORMATION: Funds to initiate construction were appropriated in FY 1964. Schedule was established by a Congressional add in FY 1994 Appropriation Bill. The jetty extension and initial sand bypassing were completed in FY 1995. However, strong storms in the area have caused significant damage to the jetty head. Additional funds were received to repair the jetty, and to pursue a temporary sand tightening of the north jetty. Temporary sand tightening of north jetty was completed in fiscal year 1998. A permanent solution to the north jetty is being investigated and is scheduled for award in June 2002. Sand bypassing will be accomplished about every six years. The next one is scheduled for award in November 2001.





APPROPRIATION TITLE: Construction, General - Channels and Harbors (Navigation)

PROJECT: Jacksonville Harbor, Florida (Continuing)

LOCATION: The project area is located at the mouth of the St. Johns River where it empties into the Atlantic Ocean in Duval County on the east coast of Florida.

DESCRIPTION: The project provides for deepening the main channel to a project depth of 40 feet from the 40-foot contour in the Atlantic Ocean to about mile 14.7; realignment of Cuts 39-41 of the main channel; deepening the West Blount Island Channel along Cuts F and G to a 40-foot depth over the existing project width of 300 feet from the main channel to the JEA/JPA petroleum terminal; and raising the existing dikes on the east end of Bartram Island to accommodate the material from deepening of the West Blount Island Channel.

AUTHORIZATION: Water Resources Development Act of 1999.

REMAINING BENEFIT - REMAINING COST RATIO: 1.4 TO 1 at 6 5/8 percent.

TOTAL BENEFIT - COST RATIO: 1.4 to 1 at 6 5/8 percent.

INITIAL BENEFIT-COST RATIO: 1.4 to 1 at 6 5/8 percent (FY99)

BASIS OF BENEFIT-COST RATIO: Benefits are included in the Jacksonville Harbor Final Feasibility Report completed in September 1998 at October 1998 price levels.

| SUMMARIZED FINANCIAL DATA                     |            | ACCUM<br>PCT OF<br>EST<br>FED<br>COST | STATUS<br>(1 January 2001) | PCT<br>CMPL | PHYSICAL<br>COMPLETION<br>SCHEDULE |
|-----------------------------------------------|------------|---------------------------------------|----------------------------|-------------|------------------------------------|
| Estimated Federal Cost                        | 11,000,000 |                                       | Channel Deepening          | 5           | Being Determined                   |
| Estimated Non-Federal Cost                    | 20,600,000 |                                       | Berthing Areas             | 5           | Being Determined                   |
| Cash Contributions                            | 5,981,000  |                                       | Total Project              | 5           | Being Determined                   |
| Other Costs                                   | 14,619,000 |                                       |                            |             |                                    |
| Total Estimated Project Cost                  | 31,600,000 |                                       |                            |             |                                    |
| Allocation to 30 September 2000               | 546,000    |                                       |                            |             |                                    |
| Conference Allowance for FY 2001              | 998,000    |                                       |                            |             |                                    |
| Allocations for FY 2001                       | 4,838,000  | 1/                                    |                            |             |                                    |
| Allocations through FY 2001                   | 5,384,000  | 49%                                   |                            |             |                                    |
| Allocations Requested for FY 2002             | 1,457,000  | 62%                                   |                            |             |                                    |
| Scheduled Balance to Complete After FY 2002   | 4,159,000  |                                       |                            |             |                                    |
| Unscheduled Balance to Complete After FY 2002 | 0          |                                       |                            |             |                                    |

/1 Reflects \$160,000 reduction assigned as savings and slippage, \$4,000,000 reprogrammed to the project and \$2,000 rescinded in accordance with the Consolidated Appropriation Act, 2001..

JUSTIFICATION: Jacksonville Harbor in 1988 and 1989 averaged about 15.4 million tons of cargo per year, 53 percent of which is bulk petroleum and coal. Port Authority representatives would like the channel deepened to accommodate larger vessels now being utilized by the world's commercial fleet. Various types of vessels carrying containers, coal, and fuel must light load instead of using full cargo carrying capacity.

| Annual Benefits          | Amount         |
|--------------------------|----------------|
| Dry Bulk                 | 2,141,000      |
| Liquid Bulk              | 753,000        |
| Benefits at Construction | <u>135,000</u> |
| Total                    | 3,029,000      |

Division: South Atlantic

District: Jacksonville

Jacksonville Harbor, FL

3 April 2001

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FISCAL YEAR 2002: The requested amount will be applied as follows:

|                                  |                |
|----------------------------------|----------------|
| Initiate Channels                | 1,352,000      |
| Planning, Engineering and Design | (125,000)      |
| Construction Management          | <u>230,000</u> |
| Total                            | 1,457,000      |

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

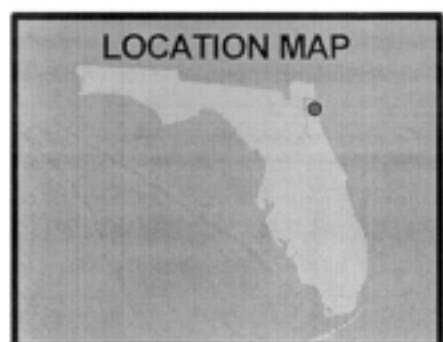
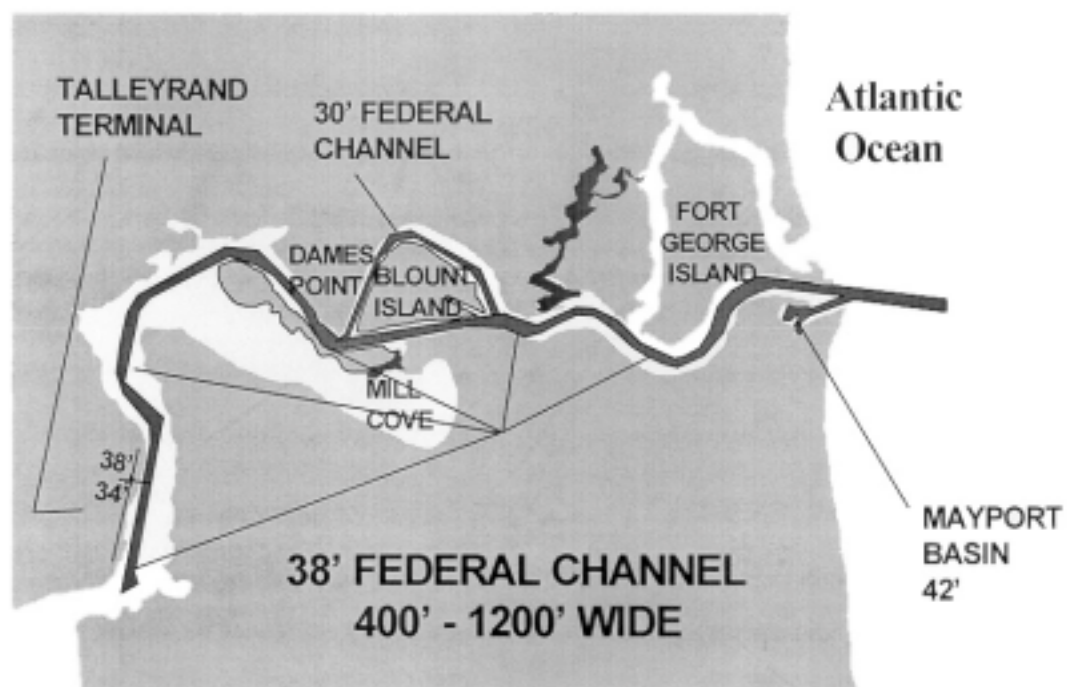
| Requirements of Local Cooperation                                                   | Payments During Construction and Reimbursements | Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs |
|-------------------------------------------------------------------------------------|-------------------------------------------------|------------------------------------------------------------------------------|
| Provide lands, easements, and rights-of-way.                                        | 10,000                                          |                                                                              |
| Pay 35 percent of the costs allocated to deep draft navigation during construction. | 5,981,000                                       |                                                                              |
| Pay 100 percent of the costs associated with dredging berthing areas and mitigation | <u>14,609,000</u>                               |                                                                              |
| Total Non-Federal Cost                                                              | 20,600,000                                      |                                                                              |

STATUS OF LOCAL COOPERATION: The Jacksonville Harbor Port Authority strongly supports this project. The Project Cooperation Agreement will be executed in FY 2001.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal (Corps of Engineers) cost estimate of \$11,000,000 is the initial estimate submitted to Congress.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Assessment was completed in September 1998.

OTHER INFORMATION: Preconstruction, Engineering, and Design was completed in July 2000.



**JACKSONVILLE HARBOR,  
FLORIDA**

APPROPRIATION TITLE: Construction, General - Channels and Harbors (Navigation)

PROJECT: Manatee Harbor, Florida (Continuing)

LOCATION: Manatee Harbor is located in Manatee County on the east side of Tampa Bay 10 miles from the Gulf of Mexico. The channel extends from the main ship channel approximately 3 miles to Port manatee.

DESCRIPTION: The project provides maintenance of the existing 40-foot deep channel and turning basin and provides for construction of a widener at the northwest end of the channel and enlargement of the turning Basin area.

AUTHORIZATION: The Water Resources Development Act of 1986 and the Water Resources Development Act of 1990.

REMAINING BENEFIT-REMAINING COST RATIO: 2.6 to 1 at 6 5/8 percent.

TOTAL BENEFIT-COST RATIO: 2.9 to 1 at 6 5/8 percent.

INITIAL BENEFIT-COST RATIO: 1.5 to 1 at 6 5/8 percent (FY 1988)

BASIS OF BENEFIT-COST RATIO: Benefits are included in the Manatee Harbor, Florida Limited Re-evaluation Report completed in March 1993 (revised January 1994) at December 1994 price level.

| SUMMARIZED FINANCIAL DATA                     |            | ACCUM<br>PCT OF<br>EST<br>FED COST | STATUS<br>(1 January 2001)    | PCT<br>CMPL | PHYSICAL<br>COMPLETION<br>SCHEDULE |
|-----------------------------------------------|------------|------------------------------------|-------------------------------|-------------|------------------------------------|
| Estimated Federal Cost (CoE)                  | 26,485,000 |                                    | Channels & Canals             |             |                                    |
| Estimated Federal Cost (USCG)                 | 15,000     |                                    | Main Channels & Turning Basin |             |                                    |
| Estimated Non-Federal Cost                    | 12,900,000 |                                    | Phase I                       | 100         | Dec 1996                           |
| Cash Contributions                            | 9,698,000  |                                    | Phase II                      | 0           | Being Determined                   |
| Other Costs                                   | 3,202,000  |                                    |                               |             |                                    |
| Total Estimated Project Cost                  | 39,400,000 |                                    | Entire Project                | 24          | Being Determined                   |
| Allocation to 30 September 2000               | 6,824,000  |                                    |                               |             |                                    |
| Conference Allowance for FY 2001              | 10,807,000 |                                    |                               |             |                                    |
| Allocations for FY 2001                       | 325,000    | 1/                                 |                               |             |                                    |
| Allocations through FY 2001                   | 7,149,000  | 27%                                |                               |             |                                    |
| Allocations Requested for FY 2002             | 1,000,000  | 31%                                |                               |             |                                    |
| Scheduled Balance to Complete After FY 2002   | 18,336,000 |                                    |                               |             |                                    |
| Unscheduled Balance to Complete After FY 2002 | 0          |                                    |                               |             |                                    |

1/ FY 01 allocation reflects \$1,732,000 assigned as savings and slippage, \$8,750,000 reprogrammed from the project and \$21,000 rescinded in accordance with the Consolidated Appropriation Act, 2001.

#### PHYSICAL DATA

Provide for maintenance of the existing 40-foot deep draft navigation channel and turning basin extending from the Tampa Bay Channel to Port Manatee. Initial construction of a widener at the northwest end of Manatee Harbor Channel and deepening of 6.6 acres to provide a larger turning basin. An 11.5 acre emergent island will be created as mitigation for the deepening.

JUSTIFICATION: In less than 9 years, Port Manatee became the major Non-Federal port in Florida. The Port is now and is expected to remain as a bulk commodity port which services deep draft vessels. The manatee Port Authority continues to develop facilities in an on-going effort to attract waterborne interests. Shoaling in the channel has restricted vessel loadings resulting in increased transportation costs. The existing wideners and turning basin are not adequate for safe navigation. The project improvements would remedy those problems and help expand the economic base of the surrounding area. Estimated average annual benefits are as follows:

| Annual Benefits       | Amount           |
|-----------------------|------------------|
| Deep Draft Navigation | <u>7,648,000</u> |
| Total                 | 7,648,000        |

FISCAL YEAR 2002: The requested amount will be applied as follows:

|                                 |                |
|---------------------------------|----------------|
| Initiate Disposal Area Dikes    | 529,000        |
| Planning, Engineering, & Design | ( 392,000)     |
| Construction Management         | <u>863,000</u> |
| Total                           | 1,000,000      |

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

| Requirements of Local Cooperation                                                                                                                                                                                                                                                                                                                                                         | Payments During Construction and Reimbursements | Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|------------------------------------------------------------------------------|
| Provide lands, easements, and rights of way, and dredged material disposal areas before WRDA of 1996 .                                                                                                                                                                                                                                                                                    | \$ 3,202,000                                    |                                                                              |
| Pay 25 percent of the costs allocated to deep draft navigation and dredged material disposal areas during construction.                                                                                                                                                                                                                                                                   | 8,859,000                                       |                                                                              |
| Reimburse an additional 10 percent of the costs of general navigation features allocated to commercial navigation within a period of 30 years following completion of construction as reduced by a credit allowed for the value of lands, easements, rights of way, relocations, and dredged or excavated material disposal areas provided for commercial navigation before WRDA of 1996. | 0                                               |                                                                              |
| Pay 100% of the costs associated with dredging berthing areas and mitigation provisions.                                                                                                                                                                                                                                                                                                  | <u>839,000</u>                                  |                                                                              |
| Total Non-Federal Cost                                                                                                                                                                                                                                                                                                                                                                    | 12,900,000                                      |                                                                              |

Division: South Atlantic

District: Jacksonville

Manatee Harbor, FL

3 April 2001

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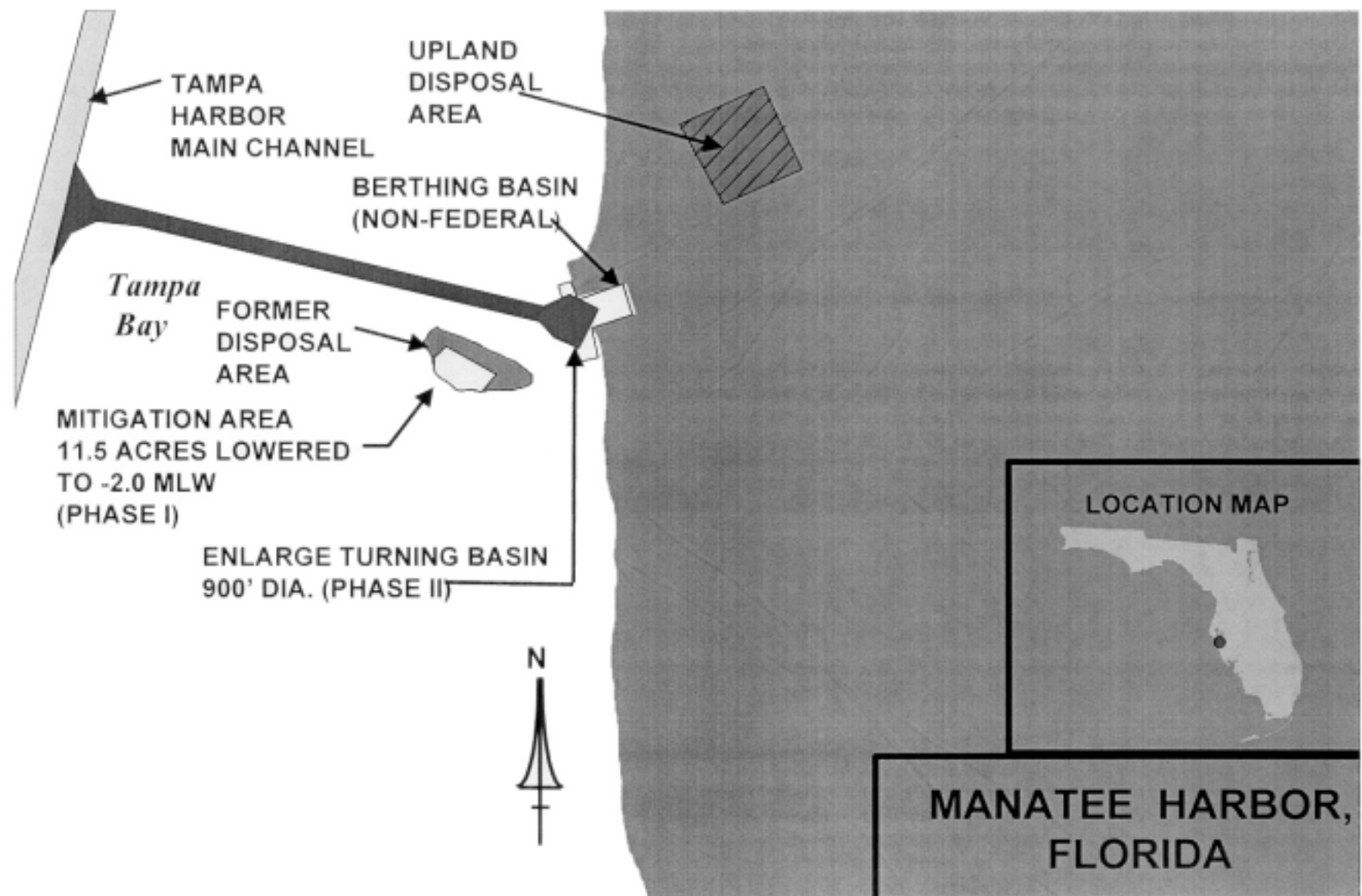
STATUS OF LOCAL COOPERATION: The Port Manatee Authority strongly supports this project. A Project Cooperation Agreement was executed in March 1995. An Amendment to this is scheduled to be executed in FY 2002.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal (Corps of Engineers) cost estimate of \$26,485,000 is an increase of \$1,300,000 from the latest cost estimate of \$25,185,000 submitted to Congress (FY 2000). This change includes the following:

| Item             | Amount              |
|------------------|---------------------|
| Schedule Changes | <u>\$ 1,300,000</u> |
| Total            | 1,300,000           |

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Environmental Assessment and the Finding of No Significant Impact (FONSI) were signed on April 3, 1992.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1982 and funds to initiate construction were appropriated in FY 1988. A PAC was approved in November 1990 and an LRR was approved in July 1994. A GRR is scheduled for completion in FY 2001. The current scheduled completion date for the programmed work is being determined. The dredging is being completed in two phases. Phase I was completed in December 1996 and the second phase schedule is being determined.



APPROPRIATION TITLE: Construction, General - Channels and Harbors (Navigation)

PROJECT: Miami Harbor Channel, Florida (Continuing)

LOCATION: Miami Harbor is located in Biscayne Bay, a shallow salt water sound on the Atlantic Coast near the southern end of the Florida Peninsula.

DESCRIPTION: The project provides for construction and maintenance of a 44 feet deep entrance channel, 42 feet deep interior channels, and a turning basin with a depth of 42 feet and a diameter of 1,600 feet located at the Dodge-Lummus Island intersection.

AUTHORIZATION: Water Resources Development Act of 1990.

REMAINING BENEFIT-REMAINING COST RATIO: 1.5 to 1 at 6 5/8 percent.

TOTAL BENEFIT-COST RATIO: 1.5 to 1 at 6 5/8 percent.

INITIAL BENEFIT-COST RATIO: 1.5 to 1 at 6 5/8 percent (FY 1992)

| SUMMARIZED FINANCIAL DATA                      |               | ACCUM<br>PCT. OF<br>EST FED.<br>COST | STATUS<br>(1 Jan 2001) | PERCENT<br>COMPLETE | PHYSICAL<br>COMPLETION<br>SCHEDULE |
|------------------------------------------------|---------------|--------------------------------------|------------------------|---------------------|------------------------------------|
| Estimated Appropriation Requirement (CoE)      | \$ 50,255,000 |                                      |                        |                     |                                    |
| Estimated Appropriation Requirement (USCG)     | 145,000       |                                      | Channels               |                     |                                    |
| Estimated Total Appropriation Requirement      | 50,400,000    |                                      | Phase I<br>Phase II    | 100<br>3            | Aug 1994<br>Being Determined       |
| Estimated Non-Federal Cost                     | 38,400,000    |                                      |                        |                     |                                    |
| Cash Contributions                             | \$ 27,033,000 |                                      | Entire Project         | 39                  | Being Determined                   |
| Other Costs                                    | 11,367,000    |                                      |                        |                     |                                    |
| Total Estimated Project Cost                   | 88,800,000    |                                      |                        |                     |                                    |
| Allocations to 30 September 2000               | 20,920,000    |                                      |                        |                     |                                    |
| Conference Allowance for FY 2001               | 2,406,000     |                                      |                        |                     |                                    |
| Allocation for FY 2001                         | 2,523,000     | 1/                                   |                        |                     |                                    |
| Allocations through FY 2001                    | 23,443,000    | 47%                                  |                        |                     |                                    |
| Allocation Requested for FY 2002               | 5,274,000     | 57%                                  |                        |                     |                                    |
| Programmed Balance to Complete after FY 2002   | 21,538,000    |                                      |                        |                     |                                    |
| Unprogrammed Balance to Complete after FY 2002 |               |                                      |                        |                     |                                    |

1/ FY 2001 allocation reflects \$1,055,000 assigned as savings and slippage, \$3,000,000 reprogrammed from the project, and \$13,000 rescinded in accordance with the Consolidated Appropriation Act, 2001.

#### PHYSICAL DATA

|          |                   |
|----------|-------------------|
| Dredging | 5,950 cubic yards |
|----------|-------------------|

Division: South Atlantic

District: Jacksonville

Miami Harbor Channel, FL

3 April 2001

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JUSTIFICATION: The port is the largest cruise ship terminal in the world as well as a major commercial harbor in Florida. Over 2.5 million passengers and 2.4 million tons of cargo passed through the harbor in 1986. Additionally, expansion of the port facilities has been occurring over the past several years. The June 1989 Feasibility Report identified problems with inadequate channel depths for deep draft navigation, an inadequate turning basin for vessels calling at Lummus/Dodge Island, and inadequate channel widths in the bar cut turn and in Government cut. Average annual benefits are as follows:

| Annual Benefits    | Amount              |
|--------------------|---------------------|
| Navigation         |                     |
| General Commercial | <u>\$ 9,177,000</u> |
| Total              | 9,177,000           |

FISCAL YEAR 2002: The requested amount will be applied as follows:

|                                         |                     |
|-----------------------------------------|---------------------|
| Funds will be used to reimburse sponsor | <u>\$ 5,274,000</u> |
| Total                                   | 5,274,000           |

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-federal sponsor must comply with the requirements listed below.

| Requirements of Local Cooperation                                                                                       | Payments During Construction And Reimbursements | Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs |
|-------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|------------------------------------------------------------------------------|
| Provide lands, easements, rights of way, and dredged material Disposal areas.                                           | \$ 62,000                                       |                                                                              |
| Modify or relocate utilities, roads, bridges, and other facilities, where Necessary for the construction of the project | 2,673,000                                       |                                                                              |
| Pay 35 percent of the costs or 100% of the unapproved costs allocated                                                   |                                                 |                                                                              |
| To deep draft navigation during construction                                                                            | 33,040,000                                      |                                                                              |
| Pay 100% of the costs associated with dredging berthing areas. .                                                        | <u>2,625,000</u>                                |                                                                              |
| Total Non-Federal Cost                                                                                                  | 38,400,000                                      |                                                                              |

STATUS OF LOCAL COOPERATION: The local sponsor is the Miami Port Authority. The Port Authority awarded the Phase II contract in September 1994. An agreement for reimbursement under Section 204(e) of the Water Resources Development Act of 1986 was executed on 1 November 1991.

Division: South Atlantic

District: Jacksonville

Miami Harbor Channel, FL

3 April 2001

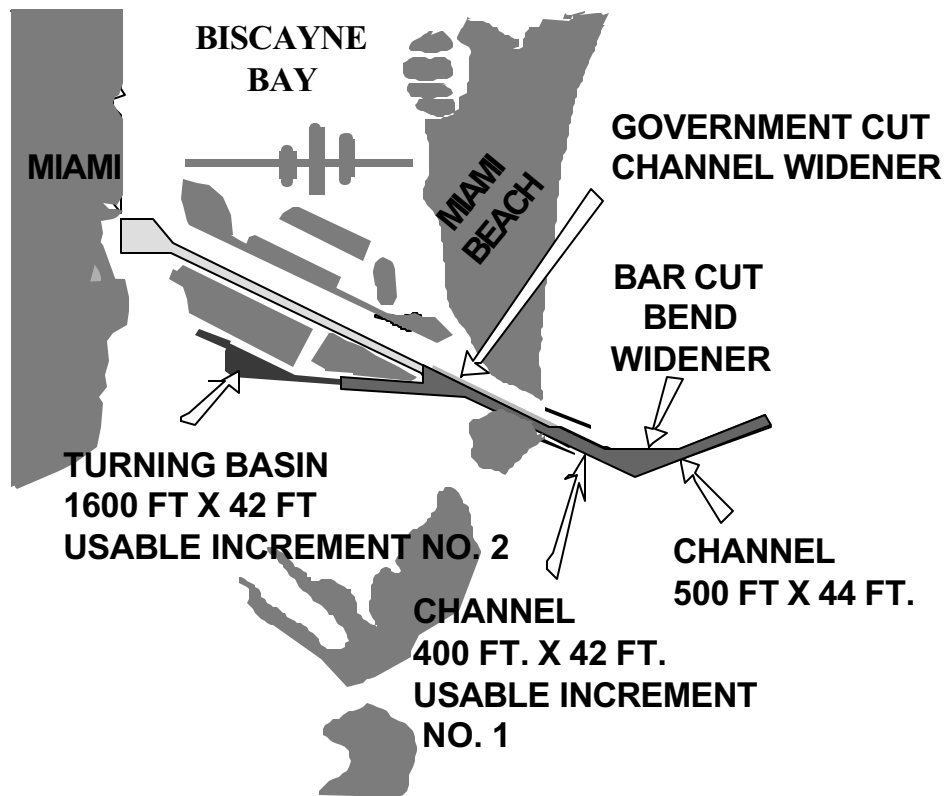
69

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps) cost estimate of \$50,255,000 is an increase of \$1,196,000 from the latest estimate of \$49,059,000 presented to Congress (FY 2000). This change includes the following:

| Item            | Amount            |
|-----------------|-------------------|
| Escalation      | \$ 750,000        |
| Schedule Change | <u>\$ 446,000</u> |
| Total           | 1,196,000         |

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Impact Statement and Section 404(b)(1) report were filed with EPA on 22 September 1991.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1989. Funds to initiate construction were appropriated in FY 1992. Phase I of the project was completed in August 1994. The scheduled completion date for Phase II is being determined.



**DISPOSAL AREA**  
5 MILES  
OFFSHORE (EAST)

**MITIGATION SITE**  
OLETA RIVER STATE  
PARK 8 MILES NORTH



**MIAMI HARBOR,  
FLORIDA**

APPROPRIATION TITLE: Construction, General - Channels and Harbors (Navigation)

PROJECT: Palm Valley Bridge, Florida (Continuing)

LOCATION: Palm Valley Bridge is located over the Intracoastal Waterway on State Road 210 in St. Johns County, Florida.

DESCRIPTION: The project provides for the replacement of the existing Palm Valley Bridge with a new high level bridge that is fixed for navigation. Additional roadway construction will be required because of the new bridge alignment. The old bridge will be removed and the intracoastal waterway in the vicinity of the old bridge will be dredged to its authorized dimensions.

AUTHORIZATION: Water Resources Development Act of 1996.

REMAINING BENEFIT-REMAINING COST RATIO: 1.6 to 1 at 6 5/8 percent.

TOTAL BENEFIT-COST RATIO: 1.3 to 1 at 6 5/8 percent.

INITIAL BENEFIT-COST RATIO: 1.5 to 1 at 6 5/8 percent (FY 1999)

BASIS OF BENEFIT-COST RATIO: Benefits are from the March 1994 Feasibility Report at October 1994 price levels.



| SUMMARIZED FINANCIAL DATA                      | ACCUM<br>PCT OF EST<br>FED COST | STATUS<br>(1 January 2001) | PCT<br>CMPL | PHYSICAL<br>COMPLETION<br>SCHEDULE |
|------------------------------------------------|---------------------------------|----------------------------|-------------|------------------------------------|
| Estimated Federal Cost                         | 19,000,000                      | Entire Project             | 30          | Sep 2002                           |
| Estimated Non-Federal Cost                     | 7,000,000                       |                            |             |                                    |
| Total Estimated Project Cost                   | 26,000,000                      |                            |             |                                    |
| Allocation to 30 September 2000                | 5,401,000                       |                            |             |                                    |
| Conference Allowance for FY 2001               | 7,485,000                       |                            |             |                                    |
| Allocations for FY 2001                        | 6,300,000                       | 1/                         |             |                                    |
| Allocations through FY 2001                    | 11,701,000                      | 62%                        |             |                                    |
| Allocations Requested for FY 2002              | 7,299,000                       | 100%                       |             |                                    |
| Programmed Balance to Complete After FY 2002   | 0                               |                            |             |                                    |
| Unprogrammed Balance to Complete After FY 2002 | 0                               |                            |             |                                    |

1/ Reflects a reduction of \$1,200,000 assigned as savings and slippage, \$15,000 reprogrammed to the project and \$15,000 rescinded in accordance with the Consolidated Appropriation Act, 2001.

PHYSICAL DATA  
High level fixed bridge

JUSTIFICATION: The Palm Valley Bridge is a Federal bascule bridge over the Intracoastal Waterway on State Road 210 in St. Johns County, Florida, and was constructed as a part of a land-cut for the Intracoastal Waterway. The bridge is maintained at Federal expense, and serves vehicular traffic using a two-lane paved secondary road that is a major hurricane evacuation route. The county is concerned that the structural constraints of the bridge, compounded by growth projections, makes this structure inadequate for current and projected usage. This bridge is situated in an area that could experience a major disaster due to storms and hurricane conditions. The risk and uncertainty of an outdated bridge that cannot handle current or future traffic demands poses a grave threat to public health and welfare. Average annual benefits are as follows:

|                 |                |
|-----------------|----------------|
| Annual Benefits | Amount         |
| Transportation  | <u>866,000</u> |
| Total           | 866,000        |

FISCAL YEAR 2002: The requested amount will be used as follows:

|                                  |                |
|----------------------------------|----------------|
| Complete Bridge Construction     | 6,132,000      |
| Relocations                      | 431,000        |
| Initiate and Complete Dredging   | 105,000        |
| Planning, Engineering and Design | 25,000         |
| Construction Management          | <u>606,000</u> |
| Total                            | 7,299,000      |

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1996, the non-Federal sponsor must comply with the requirements listed below:

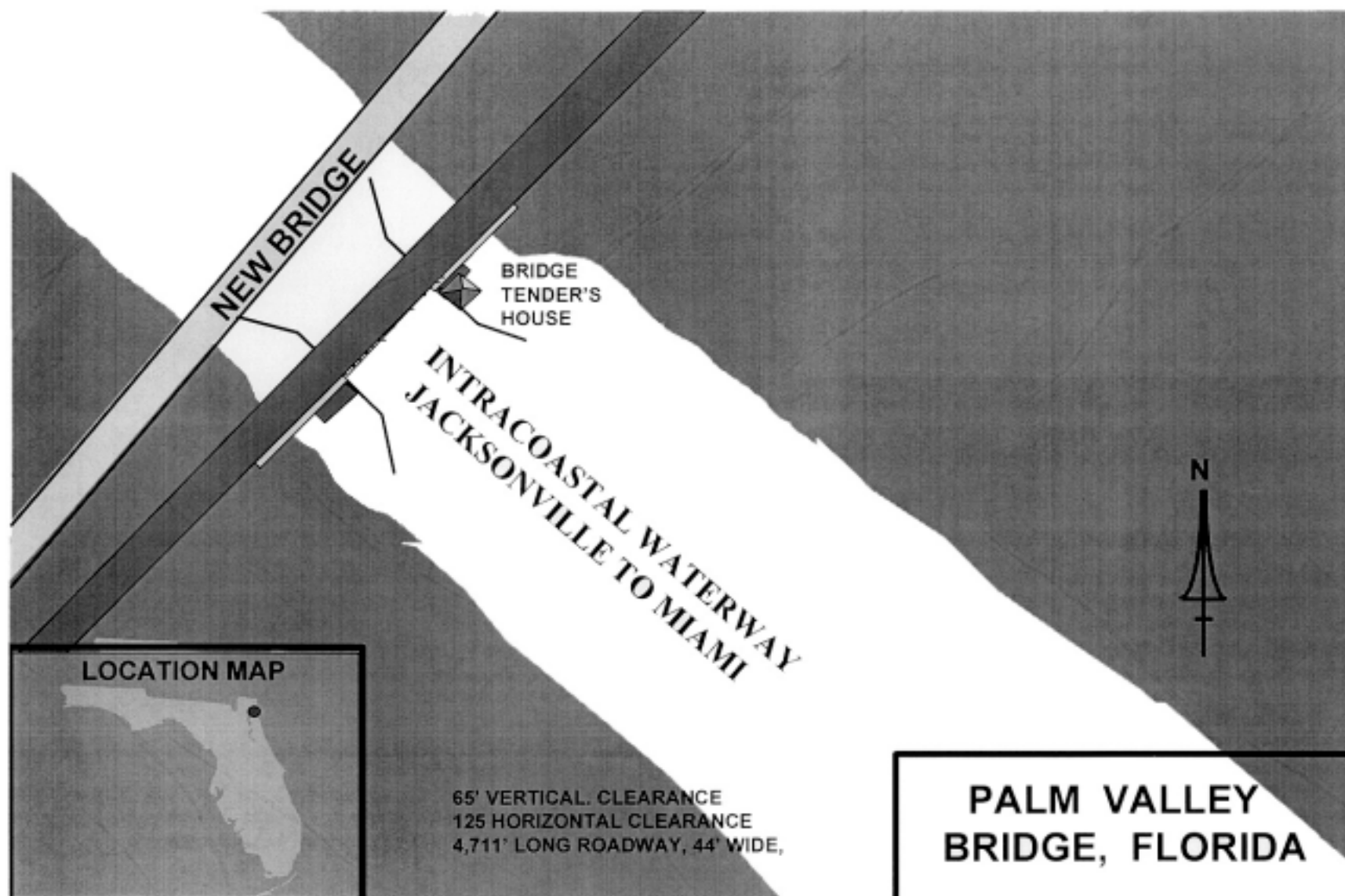
| Requirements of Local Cooperation                                           | Payments During<br>Construction and<br>Reimbursements | Annual Operation,<br>Maintenance, Repair,<br>Rehabilitation, and replacement<br>Costs |
|-----------------------------------------------------------------------------|-------------------------------------------------------|---------------------------------------------------------------------------------------|
| Pay all costs allocated to construction of additional two-lanes for bridge. | <u>7,000,000</u>                                      | <u>75,000</u>                                                                         |
| Total Non-Federal Costs                                                     | 7,000,000                                             | 75,000                                                                                |

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$19,000,000 is an increase of \$300,000 from the latest estimate (\$18,700,000) presented to Congress (FY 2000). This change includes the following:

| Item             | Amount         |
|------------------|----------------|
| Price Escalation | <u>300,000</u> |
| Total            | 300,000        |

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Finding of No Significant Impact (FONSI) was signed march 14,1994, and the Environmental Assessment has been coordinated with all necessary federal, state, and local agencies.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1994. Funds to initiate construction were appropriated in FY 1999. Construction is scheduled for completion in September 2002. Project sponsor has agreed to fund an additional two-lanes, making the bridge a four-lane bridge. This is being considered a project betterment.



APPROPRIATION: Construction, General - Channels and Harbors (Navigation)

PROJECT: Panama City Harbor, Florida, (Continuing)

LOCATION: Panama City Harbor project is located in the northwest Florida panhandle on St. Andrew Bay, at Panama City, in Bay County, Florida, about 105 miles east of Pensacola, Florida.

DESCRIPTION: The proposed plan of improvement consists of deepening the Approach Channel to 42 feet in the gulf and to 40 feet across Lands End and into the bay to intersect with a 7-mile channel 38 feet deep and 300 feet wide from Dyers Point to Bay Harbor. The plan also includes turning basins at Dyers Point and Bay Harbor of 55 acres and 42 acres, respectively, also to a depth of 38 feet, and a 177-acre anchoring and loading basin for LASH-type internodal carriers, 40 feet deep, near the inner end of the main entrance channel.

Phase I, which is a separable element of the project, consists of deepening the existing Gulf Channel from 34 feet to 38 feet; deepening the Inner Bay Channel from 32 feet to 36 feet, and constructing a new 36 feet deep branch channel from the Inner Bay Channel to Dyers Point with a turning basin area of 55 acres along the existing southern bulkhead at Dyers Point. The total length of the proposed project channel is about 8.3 miles. In addition, to provide the design dimensions of the navigation channel throughout the 2-year maintenance cycle, two sediment trap basins will be constructed inside the Gulf Approach Channel. Phase I is programmed work.

The remaining portion of the project is unprogrammed.

AUTHORIZATION: Section 201 of the Flood Control Act of 1965.

REMAINING BENEFIT-REMAINING COST RATIO: 1.7 to 1 at 7 1/8 percent for Phase I.

TOTAL BENEFIT-COST RATIO: 1.0 to 1 at 7 1/8 percent for Phase I.

INITIAL BENEFIT-COST RATIO: 1.04 to 1 at 7 1/8 percent for Phase I (FY 2000).

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation, which is contained in the General Reevaluation Report (GRR) approved in August 1995 at October 1994 price levels.

# SUMMARIZED FINANCIAL DATA

ACCUM  
PCT OF EST  
FED COST

|                                                |              |               |                                  |             |           |
|------------------------------------------------|--------------|---------------|----------------------------------|-------------|-----------|
| Estimated Appropriation Requirements (COE)     |              | \$ 25,747,000 | Allocation to 30 September 2000  | \$2,616,000 |           |
| Programmed Construction                        | \$ 6,766,000 |               | Conference Allowance for FY 2001 | 706,000     |           |
| Unprogrammed Construction                      | 18,981,000   |               | Allocation for FY 2001           | 216,000     | <u>1/</u> |
| Estimated Appropriation Requirement (U.S C.G.) |              | 222,000       | Allocation Through FY 2001       | 2,832,000   | 11        |
| Programmed Construction                        | 94,000       |               | Allocation Requested for FY 2002 | 1,215,000   | 16        |
| Unprogrammed Construction                      | 128,000      |               | Programmed Balance to Complete   |             |           |
| Estimated Total Appropriation Requirement      |              | 25,969,000    | after FY 2002                    | 2,719,000   | 26        |
| Programmed Construction                        | 6,860,000    |               | Unprogrammed Balance to Complete |             |           |
| Unprogrammed Construction                      | 19,109,000   |               | after FY 2002                    | 18,981,000  | 100       |
| Future Non-Federal Reimbursement               |              | 2,789,000     |                                  |             |           |
| Programmed Construction                        | 591,000      |               |                                  |             |           |
| Unprogrammed Construction                      | 2,198,000    |               |                                  |             |           |
| Estimated Federal Cost (Ultimate)(COE)         |              | 22,958,000    |                                  |             |           |
| Programmed Construction                        | 6,175,000    |               |                                  |             |           |
| Unprogrammed Construction                      | 16,783,000   |               |                                  |             |           |
| Estimated Non-Federal Cost                     |              | 12,220,000    |                                  |             |           |
| Programmed Construction                        | 3,362,000    |               |                                  |             |           |
| Cash Contributions                             | 2,255,000    |               |                                  |             |           |
| Other Costs                                    | 516,000      |               |                                  |             |           |
| Reimbursement                                  | 591,000      |               |                                  |             |           |
| Unprogrammed Construction                      | 8,858,000    |               |                                  |             |           |
| Cash Contributions                             | 6,327,000    |               |                                  |             |           |
| Other Costs                                    | 333,000      |               |                                  |             |           |
| Reimbursement                                  | 2,198,000    |               |                                  |             |           |
| Total Estimated Programmed Construction Cost   | 9,631,000    |               |                                  |             |           |
| Total Estimated Unprogrammed Construction Cost | 25,769,000   |               |                                  |             |           |
| Total Estimated Project Cost                   | 35,400,000   |               |                                  |             |           |

| STATUS<br>(1 Jan 2001)          | PERCENT<br>COMPLETE | PHYSICAL<br>COMPLETION |
|---------------------------------|---------------------|------------------------|
| Phase I Const.<br>(Not started) | 0                   | Being determined       |
| Remainder                       | 0                   | Indefinite             |
| Entire Project                  | 0                   | Indefinite             |

Division: South Atlantic

District: Mobile

Panama City Harbor, FL

3 April 2001

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## PHYSICAL DATA

**CHANNELS:** Deepen the Gulf Approach Channel from 34 feet to 38 feet at existing width of 450 feet. Deepen the Inner Bay Channel from 32 feet to 36 feet at existing width of 300 feet. Extend Inner Bay Channel at 36 feet deep and 300 feet wide to Dyers Point Terminal, and construct a new turning basin area of about 55 acres to a depth of 36 feet. Construct two new sediment trap basins. The deep draft ship channel will be 8.3 miles in length.

**JUSTIFICATION:** Panama City Harbor is located on the Gulf Coast at Panama City, Florida in Bay County. Between 1988 and 1998 total shipments have ranged from 2.5 million tons to 3.4 million tons. Major commodities include coal, petroleum products, forest products, iron and steel, sand and gravel and paper products.

The primary beneficiaries of a deeper channel is will include imports of liquid asphalt, limestone, granite and molasses. The liquid asphalt originates in Tampico, Mexico and Caracas, Venezuela. The granite originates in Nova Scotia, the limestone originates in the Bahamas, and the molasses originates in Coatzacoalcos, Mexico. These commodities primarily serve the market area between Fort Walton Beach, Florida in the west and Port St. Joe, Florida in the east. There is some potential for coal imports from Venezuela and Columbia in the future, however these shipments have not yet materialized and are now regarded as somewhat speculative. Vessel operators are expected to continue the practice of maintaining four feet of underkeel clearance in the Entrance channel and two feet of underkeel clearance in the Inner Harbor channel.

Based on estimates, average annual commercial navigation benefits are estimated to amount to \$676,200. In addition, incidental recreation benefits may occur from placement of "beach quality" dredged material along the Florida shoreline.

Average annual commercial navigation benefits are expected to amount to \$937,600.

**FISCAL YEAR 2002:** The requested amount will be applied as follows:

|                                  |                |
|----------------------------------|----------------|
| Initiate Construction            | \$ 915,000     |
| Planning, Engineering and Design | 50,000         |
| Construction Management          | <u>250,000</u> |
| Total                            | \$1,215,000    |

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the Non-Federal sponsor must comply with the requirements listed below.

|                                                                                                                                                                                                                                                                                                                    | Payments<br>During<br>Construction<br>And<br>Reimbursements | Annual<br>Operation,<br>Maintenance,<br>Repair,<br>Rehabilitation,<br>And<br>Replacement<br>Costs |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| Requirements of Local Cooperation                                                                                                                                                                                                                                                                                  |                                                             |                                                                                                   |
| Separable Element Phase I                                                                                                                                                                                                                                                                                          |                                                             |                                                                                                   |
| Provide lands, easements, rights of way, and borrow and excavated or dredged material disposal areas.                                                                                                                                                                                                              | \$ 311,000                                                  | \$ 0                                                                                              |
| Pay 25% of the costs allocated to general navigation facilities during construction.                                                                                                                                                                                                                               | 2,255,000                                                   | 0                                                                                                 |
| Reimburse an additional 10 percent of the costs of general navigation features allocated to commercial navigation within a period of 30 years following completion of construction, as partially reduced by a credit allowed for the value of lands, easements, disposal areas provided for commercial navigation. | 591,000                                                     | 0                                                                                                 |
| Pay 100 percent of the cost allocated to berthing area dredging (without credit).                                                                                                                                                                                                                                  | 205,000                                                     | 0                                                                                                 |

NON-FEDERAL COST (Continued):

|                                                                                                                                                                                                                                                                                                                    | Payments<br>During<br>Construction<br>And<br>Reimbursements | Annual<br>Operation,<br>Maintenance,<br>Repair,<br>Rehabilitation,<br>And<br>Replacement<br>Costs |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| Remainder                                                                                                                                                                                                                                                                                                          |                                                             |                                                                                                   |
| Provide lands, easements, rights of way, and borrow and excavated or dredged material disposal areas.                                                                                                                                                                                                              | \$ 251,000                                                  | \$ 0                                                                                              |
| Pay 25% of the costs allocated to general navigation facilities during construction.                                                                                                                                                                                                                               | 6,327,000                                                   | 0                                                                                                 |
| Reimburse an additional 10 percent of the costs of general navigation features allocated to commercial navigation within a period of 30 years following completion of construction, as partially reduced by a credit allowed for the value of lands, easements, disposal areas provided for commercial navigation. | 2,198,000                                                   | 0                                                                                                 |
| Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.                                                                                                                                                                 | 82,000                                                      | 0                                                                                                 |
| Total Non-Federal Cost                                                                                                                                                                                                                                                                                             | \$ 12,220,000                                               |                                                                                                   |



#### STATUS OF LOCAL COOPERATION:

The Non-Federal sponsor is the Panama City Port Authority at Panama City, Florida. The Panama City Port Authority provided a Letter of Intent on 14 June 1989 to sponsor construction. The Project Cooperation Agreement is scheduled to be signed in Jan 2002. The sponsor will provide berthing areas valued at \$205,000 and lands and damages valued at \$311,000 for Phase I.

On 29 May 1997, Florida Seaports Transportation Economic Development Council approved the Panama City Harbor Deep Draft Navigation Project which was submitted for funding. These trust funds will aid the non-Federal sponsor in meeting their share of the project in FY 2002.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal (Corps) cost estimate of \$25,747,000 is an increase of \$298,000 from the latest estimate of \$25,449,000 presented to Congress (FY 2001). This change includes the following items:

| Item                                      | Amount            |
|-------------------------------------------|-------------------|
| Price Escalation on Construction Features | <u>\$ 298,000</u> |
| Total                                     | \$ 298,000        |

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: In accordance with the requirements of the National Environmental Policy Act, a Draft Environmental Impact Statement (DEIS) for the entire Panama City Harbor navigation project was filed with the President's Council on Environmental Quality December 10, 1975. The DEIS was coordinated with all applicable Federal, state and local agencies and the interested public.

An EA and FONSI addressing potential impacts associated with the proposed channel improvements was signed on May 18, 1995. The EA and FONSI addressed impacts associated with the construction of a 38-foot deep, 450-foot wide Gulf Approach Channel, which narrows to a 300-foot width about halfway through the inlet throat, and a 36-foot deep channel within the St. Andrew Bay to Dyers Point Terminal and the placement of approximately 1.3 million cubic yards of dredged material from the channel located in St. Andrew Bay. The EA also addressed impacts associated with the construction of two sediment basins and maintenance dredging and placement activities for the Gulf Approach Channel, inner channel and sediment basins. This included the proposed placement of material from these channels on a designated section of the St. Andrews State Park Beach and/or the nearshore littoral zone and/or the Gator Lake Placement area. The EA addressed impacts associated with the construction of a 1000-foot wide turning basin at Dyers Point Terminal and the deepening of the Dyers Point Terminal Channel. Material dredged from the channel would be placed in deeper waters of the channel utilizing either a hydraulic cutterhead dredge with submerged pipeline discharge or water injection dredging.

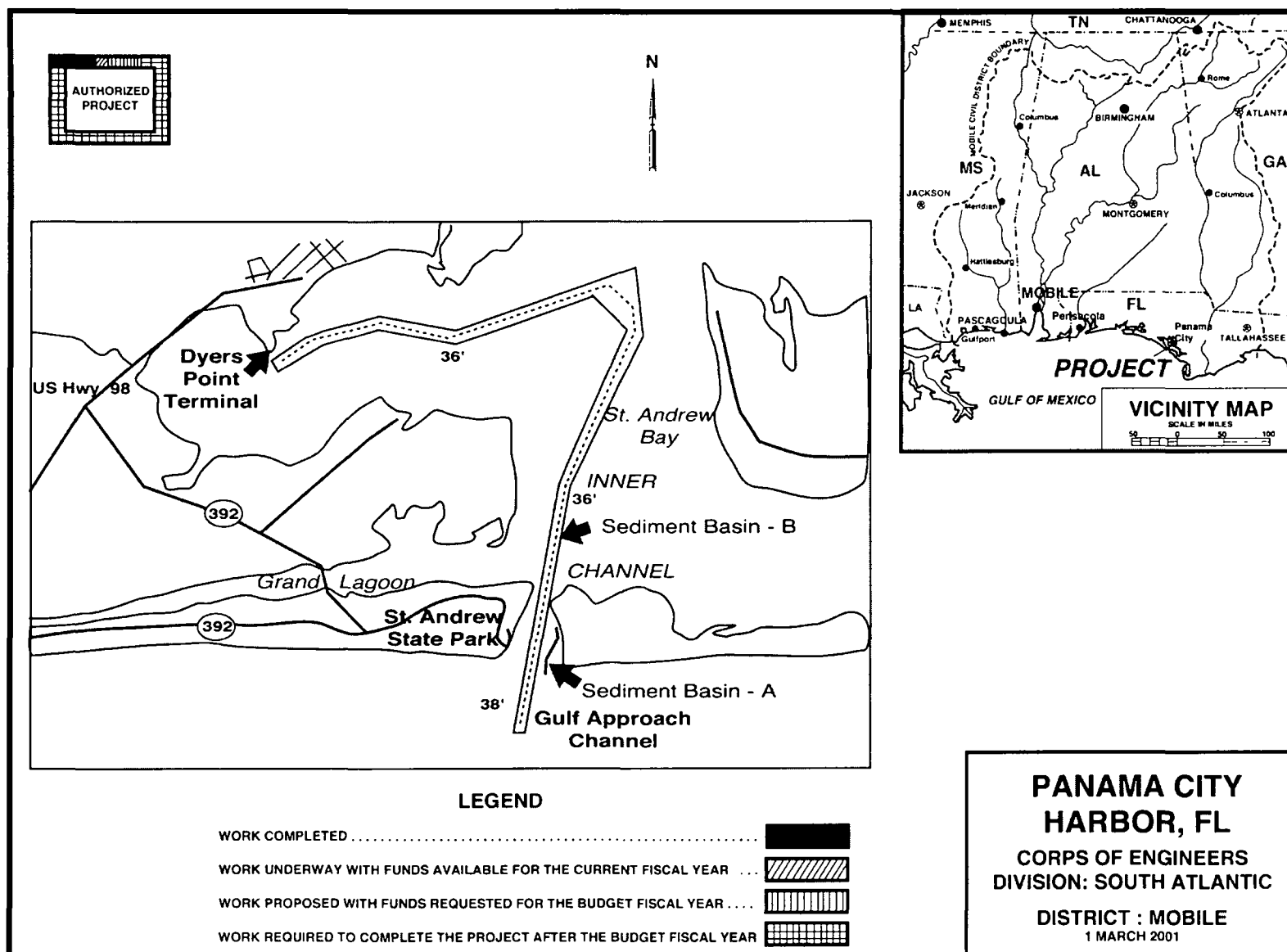
OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1990.

SUMMARIZED FINANCIAL DATA FOR PHASE I:

|                                                 |             |
|-------------------------------------------------|-------------|
| Estimated Appropriation Requirements (COE)      | \$6,766,000 |
| Estimated Appropriation Requirements (U.S.C.G ) | 94,000      |
| Estimated Total Appropriation Requirements      | 6,860,000   |
| Future Non-Federal Reimbursement                | 591,000     |
| Estimated Federal Cost (Ultimate)(COE)          | 6,175,000   |
| Estimated Non-Federal Cost                      | 3,362,000   |
| Cash Contribution                               | \$2,255,000 |
| Other Costs                                     | 516,000     |
| Reimbursements                                  | 591,000     |
| Total Estimated Project Cost                    | 9,631,000   |

REMAINING BENEFIT-REMAINING COST RATIO: 1.7 to 1 at 7 1/8 percent.

TOTAL BENEFIT-COST RATIO: 1.0 to 1 at 7 1/8 percent.



APPROPRIATION TITLE: Construction, General – Channels and Harbors (Navigation)

PROJECT: Tampa Harbor, Florida (Continuing)

LOCATION: The project area is located in Tampa and Hillsborough Bays on the West Coast of Central Florida.

DESCRIPTION: The General Reevaluation Report (GRR) would address navigation problems and concerns for the Tampa Harbor Federal Project with particular interest in a deep draft anchorage area.

AUTHORIZATION: Water Resources Development Act of 1970 (Public Law 91-611)

REMAINING BENEFIT-REMAINING COST RATIO: Not Applicable

TOTAL BENEFIT-COST RATIO: Not Applicable

INITIAL BENEFIT-COST RATIO: Not Applicable

BASIS OF BENEFIT-COST RATIO: Will be established upon completion of General Reevaluation Report.

| SUMMARIZED FINANCIAL DATA                        |            | ACCUM.<br>PCT OF EST<br>FED COST | STATUS<br>(1 January 2001) | PERCENT<br>COMPLETE | PHYSICAL<br>COMPLETION<br>SCHEDULE |
|--------------------------------------------------|------------|----------------------------------|----------------------------|---------------------|------------------------------------|
| Estimated Federal Cost                           | \$ 750,000 |                                  |                            |                     |                                    |
| Estimated Non-Federal Cost                       | 250,000    |                                  | GRR                        | 0                   | Being Determined                   |
| Cash Contribution                                | \$ 250,000 |                                  | Total Project              | 0                   | Being Determined                   |
| Other                                            | 0          |                                  |                            |                     |                                    |
| Total Estimated Project Cost                     | 1,000,000  |                                  |                            |                     |                                    |
| Allocations to 30 September 2000                 | 0          |                                  |                            |                     |                                    |
| Conference Allowance for FY 2001                 | 300,000    |                                  |                            |                     |                                    |
| Allocations for FY 2001                          | 250,000    | 1/                               |                            |                     |                                    |
| Allocations through FY 2001                      | 250,000    | 33%                              |                            |                     |                                    |
| Allocations Requested for FY 2002                | 500,000    | 100%                             |                            |                     |                                    |
| Scheduled Balance to Complete<br>After FY 2002   | 0          |                                  |                            |                     |                                    |
| Unscheduled Balance to Complete<br>After FY 2002 | 0          |                                  |                            |                     |                                    |

1/ FY 01 reflects \$48,000 reduction assigned as savings and slippage, \$1,000 reprogrammed from the project and \$1,000 rescinded in accordance with the Consolidated Appropriation Act , 2001.

JUSTIFICATION: Directed by Congress in fiscal year 2001 to initiate General Reevaluation Report.

FISCAL YEAR 2002: The requested amount will be applied as follows:

|                        |                |
|------------------------|----------------|
| Engineering and Design | <u>500,000</u> |
| Total                  | 500,000        |

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

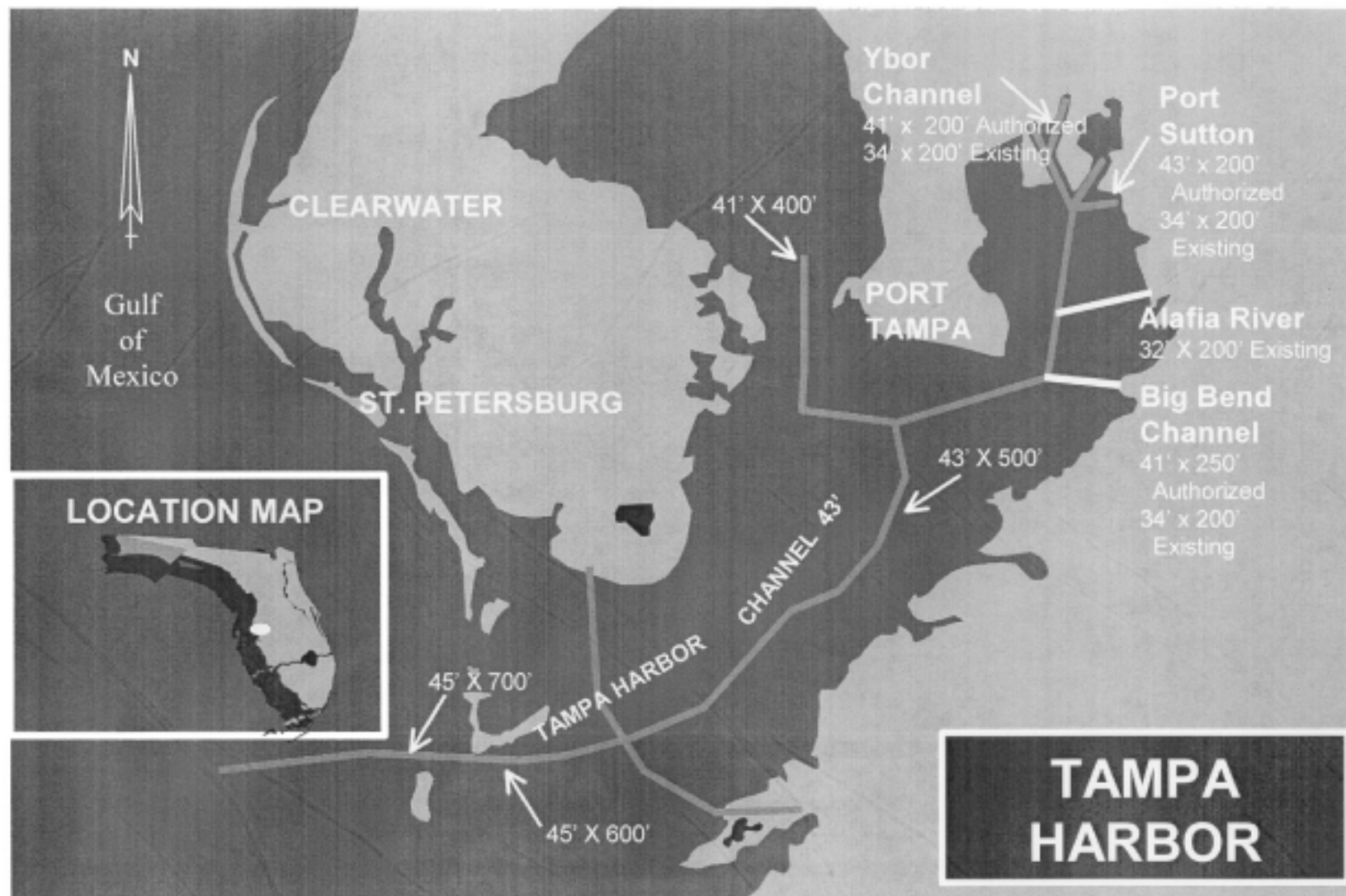
| Requirements of Local Cooperation                                                                                          | Payments During<br>Construction and<br>Reimbursements | Annual Operation,<br>Maintenance, Repair,<br>Rehabilitation, and<br>Replacement Costs |
|----------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|---------------------------------------------------------------------------------------|
| Provide lands, easements, rights of way.                                                                                   | 0                                                     |                                                                                       |
| Modify or relocate Utilities, roads, bridges, and other Facilities,<br>where necessary for the construction of the project | 0                                                     |                                                                                       |
| Pay 25 percent of cost for the General Reevaluation Report.                                                                | <u>250,000</u>                                        |                                                                                       |
| Total Non-Federal Costs                                                                                                    | 250,000                                               |                                                                                       |

STATUS OF LOCAL COOPERATION: Tampa Port Authority strongly supports this project Design Agreement is scheduled for initiation in April 2001.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal (Corps of Engineers) cost estimate of \$1,000,000 is the initial estimate submitted to Congress.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: Will be established with the completion of the General Reevaluation Report.

OTHER INFORMATION: There are ongoing construction projects in Tampa Harbor including Ybor Channel Turning Basin. The Tampa Port Authority has also requested that construction be initiated on the Tampa Harbor, Big Bend Channel Project.



APPROPRIATION TITLE: Construction, General – Channels and Harbors (Navigation)

PROJECT: Brunswick Harbor, Georgia (Continuing)

LOCATION: Brunswick Harbor is located in an estuary along the Atlantic Coast approximately 80 miles south of Savannah, Georgia and 70 miles north of Jacksonville, Florida. An entrance channel 9 miles in length is maintained from the mouth of the harbor, Station 0+000 to Station –52+500B. The port's primary docks and terminals are located on the east bank of East River in the City of Brunswick. The remaining docks and terminals are situated along the south bank of South Brunswick River on Colonel's Island, located in Glynn County.

DESCRIPTION: The recommended project consists of deepening the Bar Channel from –32 feet mlw to –38 feet mlw; deepening the Inner and Upper Harbor Channels from –30 feet mlw to –36 feet mlw; constructing a new turning basin in the Upper East River Channel approximately 1,100 feet by 1,100 feet and deauthorizing the existing East River turning basin; raising the dikes at Andrews Island disposal site from approximately +26 feet mlw to approximately +35 feet mlw; widening the channel at the new Sidney Lanier Bridge from 200 to 400 feet; widening approximately 10,000 feet of the Turtle River Lower Range from 300 to 400 feet; widening approximately 5,750 feet in the Upper East River Channel from 350 to 400 feet; and expanding the Lower Turtle River turning basin to approximately 2,500 feet by 1,150 feet.

AUTHORIZATION: Water Resources Development Act of 1999.

REMAINING BENEFIT - REMAINING COST RATIO: 1.9 to 1 at 6 7/8 percent.

TOTAL BENEFIT - COST RATIO: 1.9 to 1 at 6 7/8 percent.

INITIAL BENEFIT - COST RATIO: 1.9 to 1 at 6 7/8 percent (FY 2001).

BASIS OF BENEFIT - COST RATIO: Benefits are from the latest available evaluation contained in the Brunswick Harbor Deepening Feasibility Report dated March 1998 at October 1998 price levels.



| SUMMARIZED FINANCIAL DATA                      |            | ACCUM<br>PCT OF EST<br>FED COST | STATUS<br>(1 Jan 2001) | PERCENT<br>COMPLETE | PHYSICAL<br>COMPLETION<br>SCHEDULE |
|------------------------------------------------|------------|---------------------------------|------------------------|---------------------|------------------------------------|
| Estimated Total Appropriation Requirement      | 41,461,000 |                                 | Entire Project         | 8                   | Being determined                   |
| Future Non-Federal Reimbursement               | 5,504,000  |                                 |                        |                     |                                    |
| Estimated Federal Cost (Ultimate)              | 35,957,000 |                                 |                        |                     |                                    |
| Estimated Non-Federal Cost                     |            |                                 |                        |                     |                                    |
| Cash Contributions                             | 13,829,000 |                                 |                        |                     |                                    |
| Other Costs                                    | 28,000     |                                 |                        |                     |                                    |
| Reimbursements                                 | 5,504,000  |                                 |                        |                     |                                    |
| Total Estimated Project Cost                   | 55,318,000 |                                 |                        |                     |                                    |
| Allocations to 30 September 2000               | 1,834,000  |                                 |                        |                     |                                    |
| Conference Allowance for FY 2001               | 250,000    |                                 |                        |                     |                                    |
| Allocation for FY 2001                         | 210,000    | 1/                              |                        |                     |                                    |
| Allocations through FY 2001                    | 2,044,000  | 6                               |                        |                     |                                    |
| Allocation Requested for 2002                  | 4,084,000  | 18                              |                        |                     |                                    |
| Programmed Balance to Complete after FY 2002   | 35,333,000 |                                 |                        |                     |                                    |
| Unprogrammed Balance to Complete after FY 2002 | 0          |                                 |                        |                     |                                    |

1/ Reflects \$40,000 reduction assigned as savings and slippage.

#### PHYSICAL DATA

##### Channels:

Deepen Inner and Upper Harbor Channels from –30' mlw to –36' mlw. Deepen Bar Channel from –32' mlw to –38' mlw. Widen the Channel at new Sidney Lanier Bridge from 200' to 400'. Widen 10,000' of Turtle River Lower Range from 300' to 400'. Widen 5,750' in Upper East River Channel from 350' to 400'.

Turning Basin: Construct new turning basin in Upper East River Channel 1,100' by 1,100'. Expand Lower Turtle River turning basin 2,500' by 1,150'.

##### Disposal Site:

Raise dikes at Andrews Island from approximately +26' mlw to approximately +35' mlw.

**JUSTIFICATION:** The harbor consists of 28 miles of channel, including nine miles of entrance channel and two turning basins. Existing authorized project depths consist of –30 feet mlw in the Inner Harbor and –32 feet mlw in the Bar Channel. Overall tonnage has increased for the fifth consecutive year. A total of 2.3 million tons in fiscal year 1997 reflects a 24 percent increase over the previous fiscal year. However, current imports and exports through the port continue to be limited by insufficient channel depth in the form of tidal delays and light loading. This problem is most acute with bulk and breakbulk carriers, although the automobile carriers experience some tidal delay. As traffic continues to increase and as vessels in the world fleet continue to grow in size due to the retirement of smaller ships, the problem will be exacerbated in the future. Average annual benefits, all commercial navigation, are \$6,651,000 at October 1998 price levels.

Average annual benefits are as follows:

| Annual Benefits       | Amount    |
|-----------------------|-----------|
| Commercial Navigation | 6,651,000 |
| Total                 | 6,651,000 |

FISCAL YEAR 2002: The requested amount of \$4,084,000 will be applied as follows:

|                                  |                 |
|----------------------------------|-----------------|
| Initiate Construction            | 3,600,000       |
| Planning, Engineering and Design | 84,000          |
| Construction Management          | 400,000         |
| <br>Total                        | <br>\$4,084,000 |

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

| Requirements of local Cooperation                                                                                                                                                                                                                                                                                                                                  | Payments During<br>Construction and<br>Reimbursements | Annual Operation,<br>Maintenance, Repair,<br>Rehabilitation, and<br>Replacement Costs |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|---------------------------------------------------------------------------------------|
| Provide lands, easements, rights of way, and dredged material disposal areas.                                                                                                                                                                                                                                                                                      |                                                       | 28,000                                                                                |
| Pay 25 percent of the costs allocated to general navigation facilities during construction and pay 50 percent of the costs of incremental maintenance below 45 feet below mean low water.                                                                                                                                                                          | 13,829,000                                            | 50,000                                                                                |
| Reimburse an additional 10 percent of the costs of general navigation features allocated to commercial navigation within a period of 30 years following completion of construction as partially reduced by a credit allowed for the value of lands, easements, rights of way, relocations, and dredged material disposal areas provided for commercial navigation. | 5,504,000                                             |                                                                                       |
| Total                                                                                                                                                                                                                                                                                                                                                              | 19,361,000                                            | 78,000                                                                                |

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction and reimburse its share of construction costs within a period of 30 years following completion of construction.

STATUS OF LOCAL COOPERATION: The Georgia Ports Authority (GPA) is the local sponsor. The GPA expects to fund its share of project construction with monies provided by the State of Georgia. It is the intent of GPA to enter a budget request for FY 2001 to the Governor of the State of Georgia for the State to authorize issuance of 20-year General Obligation Bonds specifically for the deepening of Brunswick Harbor. The amount of the bonds should be more than adequate to meet the non-Federal sponsor's share of the total project costs and should become available 1 July 2001. The Project Cooperation Agreement is scheduled to be executed in September 2001.

Division: South Atlantic

District: Savannah

Brunswick Harbor, GA

3 April 2001

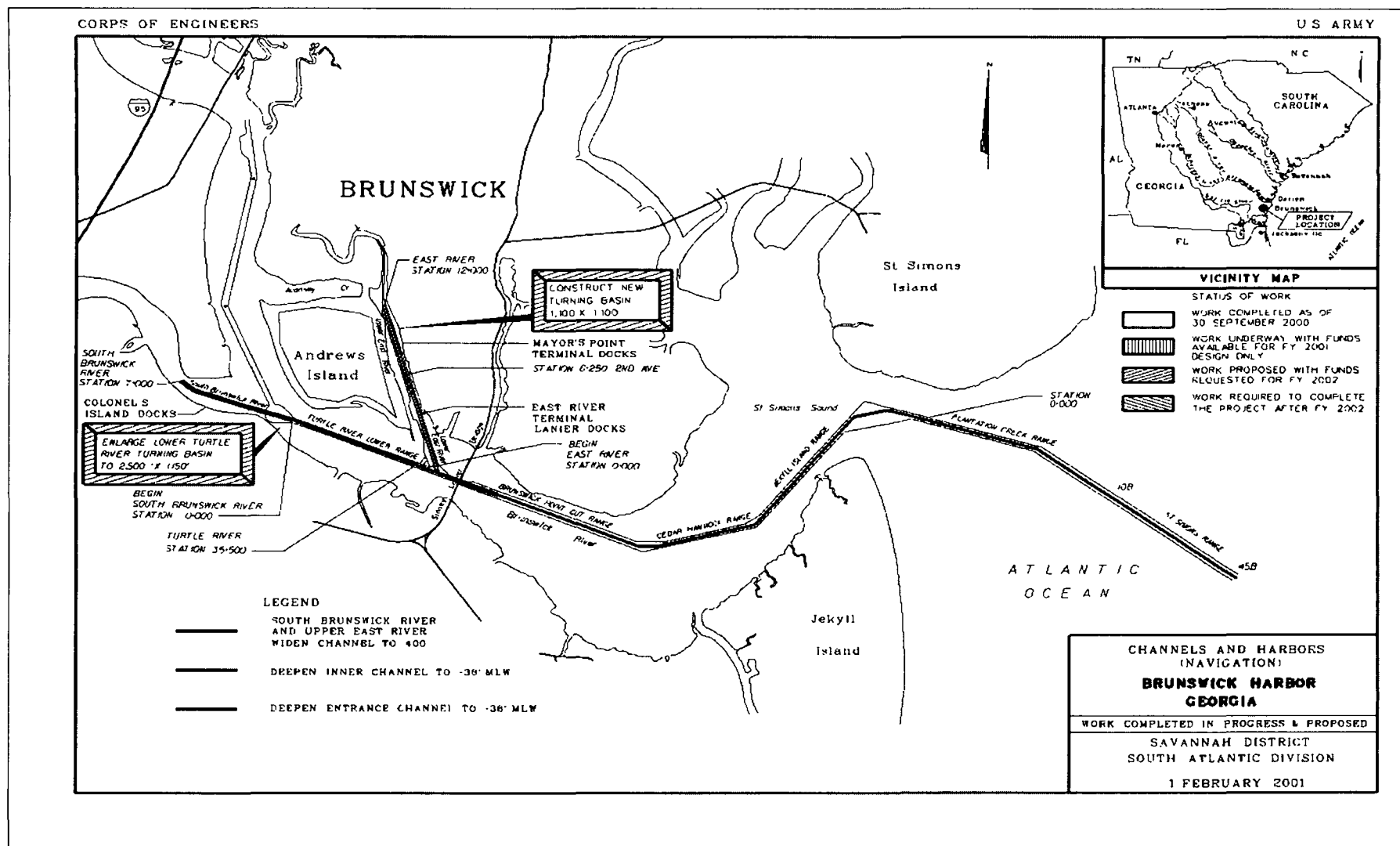
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COMPARISON OF FEDERAL COST ESTIMATES: The current Federal Corps cost estimate of \$41,461,000 is the same as the latest estimate presented to Congress (FY 2001).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final EIS was filed with EPA on 12 June 1998.

OTHER INFORMATION: Construction General funds to initiate construction were appropriated in FY 2001.

A mitigation plan was developed to compensate for the unavoidable losses of 18.1 acres of spartina saltmarsh due to the project. The plan calls for restoration of 45 acres of non-functioning wetlands at an estimated cost of \$758,000. A monitoring program will be implemented to ensure that the restoration action is functioning as intended.



APPROPRIATION TITLE: Construction, General – Channels and Harbors (Navigation)

PROJECT: Lower Savannah River Basin, Georgia and South Carolina (Continuing)

LOCATION: The project is located on the Savannah River between river mile 40.9 and river mile 42.0, approximately 20 river miles above the city of Savannah, Georgia. The project area itself is located within Effingham County, Georgia and Jasper County, South Carolina. A portion of the project is within the Federal Savannah National Wildlife Refuge.

DESCRIPTION: The Lower Savannah River Basin Environmental Restoration Project includes construction of a partial diversion structure at the entrance to navigation cut #3 and cutoff bend #3 (river mile 40.9), improvements to the channel to the mouth of Bear Creek to restore flows, and restoration of the mouth of Mill Creek (river mile 42.0). A 5-year monitoring program following completion of construction will evaluate the effectiveness of the project.

AUTHORIZATION: Water Resources Development Act of 1996.

REMAINING BENEFIT - REMAINING COST RATIO: N/A

TOTAL BENEFIT - COST RATIO: N/A

INITIAL BENEFIT - COST RATIO: Benefits are non-monetary and a benefit-cost ratio was not developed.

BASIS OF BENEFIT - COST RATIO: N/A

| SUMMARIZED FINANCIAL DATA                      |           | ACCUM<br>PCT OF<br>EST<br>FED COST | STATUS<br>(1 Jan 2001) | PERCENT<br>COMPLETE | PHYSICAL<br>COMPLETION<br>SCHEDULE |
|------------------------------------------------|-----------|------------------------------------|------------------------|---------------------|------------------------------------|
| Estimated Federal Cost                         |           | 3,167,000                          | Entire Project         | 18                  | Being<br>determined                |
| Estimated Non-Federal Cost                     |           | 1,055,000                          |                        |                     |                                    |
| Cash Contributions                             | 1,027,000 |                                    |                        |                     |                                    |
| LERR&D                                         | 28,000    |                                    |                        |                     |                                    |
| Total Estimated Project Cost                   |           | 4,222,000                          |                        |                     |                                    |
| Allocations to 30 September 2000               |           | 667,000                            |                        |                     |                                    |
| Conference Allowance for FY 2001               |           | 1,500,000                          |                        |                     |                                    |
| Allocation for FY 2001                         |           | 457,000                            | 1/                     |                     |                                    |
| Allocations through FY 2001                    |           | 1,124,000                          | 35                     |                     |                                    |
| Allocation Requested for 2002                  |           | 1,300,000                          | 77                     |                     |                                    |
| Programmed Balance to Complete after FY 2002   |           | 743,000                            |                        |                     |                                    |
| Unprogrammed Balance to Complete after FY 2002 |           | 0                                  |                        |                     |                                    |

1/ Reflects \$240,000 reduction assigned as savings and slippage, \$800,000 reprogrammed from the project, and \$3,000 rescinded in accordance with the Consolidated Appropriations Act, 2001.

#### PHYSICAL DATA

##### Diversion Structure:

Constructed of riprap approximately 1/3 the width of the river.

##### Improvements to Mouth of Bear Creek:

Reorient the mouth so it faces upstream; construct narrow approach channel; plug cutoff bend #3.

##### Restoration of Mill Creek:

Relocate and realign the mouth toward the river flow; sediment removal at the mouth.

**JUSTIFICATION:** The River and Harbor Act of 1950 authorized a 9-foot Federal navigation project extending from Augusta, Georgia to the upper limit of Savannah Harbor in Savannah, Georgia. As a method to improve navigation on the river, cuts were installed in the 1960's and 1970's. These cuts straightened and shortened the river course and, as a result, channeled flow away from the original watercourse. Depletion of natural river flows through the cutoff bends has resulted in rapid siltation and loss of flow to creeks originating at the bends and their surrounding wetland areas. The project will restore the natural flow regime in creeks and wetland areas while simultaneously restoring the environment and wildlife habitat to their pre-navigation conditions. Without environmental restoration, aquatic habitat will diminish and forested wetlands, which require periodic inundation, will be irreversibly degraded. Environmental benefits, which would accrue from the project, consist of fish habitat and bottomland hardwoods. In addition, improvements to the environment will directly benefit at least nine species of plants and animals found on the Federal list of threatened and endangered species, including the shortnose sturgeon, peregrine falcon, bald eagle, and wood stork. Benefits are non-monetary.

**FISCAL YEAR 2002:** The requested amount of \$1,300,000 will be applied as follows:

|                                  |                    |
|----------------------------------|--------------------|
| Continue Construction            | 1,150,000          |
| Planning, Engineering and Design | 30,000             |
| Construction Management          | 120,000            |
| <b>Total</b>                     | <b>\$1,300,000</b> |

**NON-FEDERAL COST:** In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

|                                   | Payments During<br>Construction and<br>Reimbursements | Annual Operation,<br>Maintenance, Repair,<br>Rehabilitation, and<br>Replacement Costs |
|-----------------------------------|-------------------------------------------------------|---------------------------------------------------------------------------------------|
| Requirements of local Cooperation |                                                       |                                                                                       |
| <b>Total Non-Federal Costs</b>    |                                                       | <b>1,055,000</b>                                                                      |

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

**STATUS OF LOCAL COOPERATION:** The city of Savannah, Georgia is the non-Federal project sponsor. The Project Cooperation Agreement was executed in July 2000. The city has successfully participated in several cost shared projects with the Federal government. During recent bond issuance planning, the financial needs for the project were taken into account. The city continues to maintain an AA bond rating.

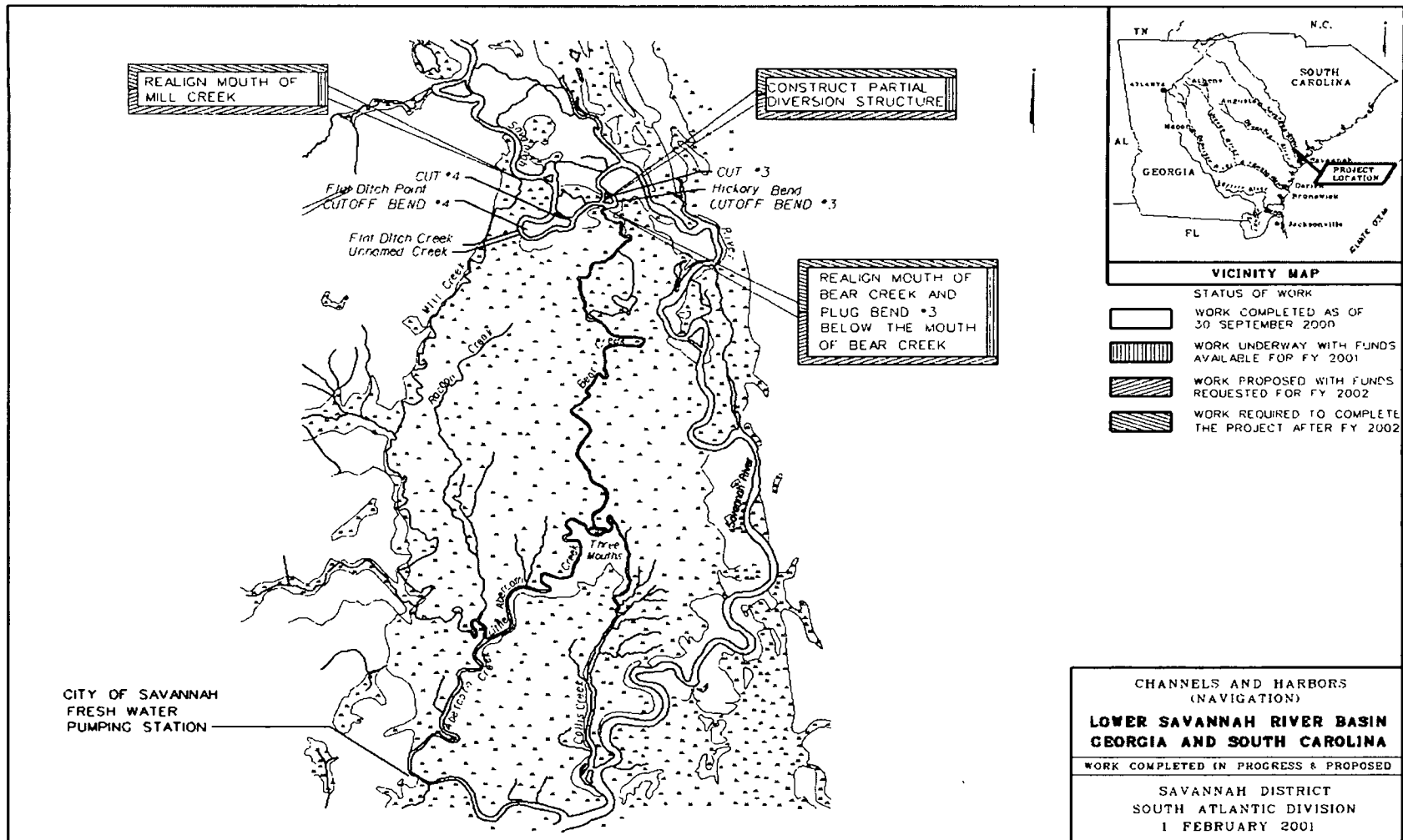


COMPARISON OF FEDERAL COST ESTIMATES: The current Federal Corps cost estimate of \$4,222,000 is the same as last presented to Congress (FY 2001).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An Environmental Assessment (EA) was prepared for the project and a Finding of No Significant Impact was signed on March 22, 1996.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1996. Funds to initiate construction were appropriated in FY 2000. There will be minimal operation and maintenance associated with this project. The city of Savannah is 100 percent responsible for all normal operation and maintenance. All project features are designed to not require maintenance over the 50-year project life.

Provisions are included for monitoring the results of the project for a period of five years beginning one year prior to construction. Within the project area, the U.S. Geological Survey will assess stream flow and water quality at various locations and the U.S. Fish and Wildlife Service will make periodic field observations of the conditions of the creeks and forested wetlands.



APPROPRIATION: Construction, General - Channels and Harbors (Navigation)

PROJECT: Gulfport Harbor, Mississippi (Continuing)

LOCATION: Gulfport Harbor is located on the Gulf Coast, at Gulfport, in Harrison County, Mississippi, about midway between New Orleans, Louisiana, and Mobile, Alabama. The deep draft ship channel runs southward from Gulfport through Mississippi Sound into deep water in the Gulf of Mexico.

DESCRIPTION:

PHASE I (COMPLETED): The most recent improvement to the Federal navigation project included deepening the existing channel from 30 feet to 36 feet deep at the existing width of 220 feet for a distance of 10.38 miles in the Mississippi Sound; relocated the Ship Island Pass channel segment approximately 1,900 feet west of the present channel alignment, and reconstructed the channel segment from 32 feet to 38 feet deep at the existing width of 300 feet for a distance of 2.64 miles; deepened the Gulf channel segment to 38 feet at the existing width of 300 feet for a distance of 6.8 miles; removed an old breakwater from the entrance to the turning basin; constructed the northern portion of the turning basin to 36 feet deep for about 4,200 feet in length. This work was completed in 1994.

REMAINDER: Most recently, the Water Resources Development Act of 2000 authorized the Corps to conduct a study to determine the feasibility of modifying the project for navigation. A General Re-evaluation Report (GRR) to formulate alternative plans and determine the feasibility of additional deepening and widening of the Federal project is in the early stages of preparation.

AUTHORIZATION: Supplemental Appropriations Act of 1985, Water Resources Development Act of 1986, Water Resources Development Act of 1988 and Water Resources Development Act of 2000.

REMAINING BENEFIT-REMAINING COST RATIO: 2.0 to 1 at 8 7/8 percent.

TOTAL BENEFIT-COST RATIO: 1.04 to 1 at 8 7/8 percent.

INITIAL BENEFIT-COST RATIO: 1.1 to 1 at 8 7/8 percent.

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation approved in March 1990 at October 1989 price levels.

| SUMMARIZED FINANCIAL DATA                    |            |            |                                                         | ACCUM<br>PCT OF EST<br>FED COST |            |
|----------------------------------------------|------------|------------|---------------------------------------------------------|---------------------------------|------------|
| Estimated Appropriation Requirements (COE)   |            | 32,948,000 | Allocation to 30 September 2000                         | \$25,915,000                    |            |
| Programmed Construction                      | 27,415,000 |            | Conference Allowance for FY 2001                        | 200,000                         |            |
| Unprogrammed Construction                    | 5,533,000  |            | Allocation for FY 2001                                  | 168,000                         | 1/         |
| Estimated Appropriation Requirement U.S.C.G) |            | 161,000    | Allocation Through FY 2001                              | 26,083,000                      | 64         |
| Programmed Construction                      | 140,000    |            | Allocation Requested for FY 2002                        | 100,000                         | 68         |
| Unprogrammed Construction                    | 21,000     |            | Programmed Balance to Complete                          |                                 |            |
| Estimated Total Appropriation Requirement    |            | 33,109,000 | after FY 2002                                           | 1,232,000                       | 83         |
| Programmed Construction                      | 27,555,000 |            | Unprogrammed Balance to Complete                        |                                 |            |
| Unprogrammed Construction                    | 5,554,000  |            | after FY 2002                                           | 5,533,000                       | 100        |
| Non-Federal Reimbursement                    |            | 4,394,000  | 1/ Reflects \$32,000 reduction as savings and slippage. |                                 |            |
| Programmed Construction                      | 3,455,000  |            |                                                         |                                 |            |
| Unprogrammed Construction                    | 939,000    |            |                                                         |                                 |            |
| Estimated Federal Cost (Ultimate)(COE) /     |            | 28,554,000 | STATUS                                                  | PERCENT                         | PHYSICAL   |
| Programmed Construction                      | 23,960,000 |            | (1 Jan 2001)                                            | COMPLETE                        | COMPLETION |
| Unprogrammed Construction                    | 4,594,000  |            | Construction                                            |                                 |            |
| Estimated Non-Federal Cost                   |            |            | Phase I                                                 | 100                             | Jan 1994   |
| Programmed Construction                      | 15,197,000 | 17,981,000 | Remainder                                               | 0                               | Indefinite |
| Cash Contributions                           | 9,139,000  |            | Entire Project                                          | 68                              | Indefinite |
| Other Costs                                  | 2,603,000  |            |                                                         |                                 |            |
| Reimbursements                               | 3,455,000  |            |                                                         |                                 |            |
| Unprogrammed Construction                    | 2,784,000  |            |                                                         |                                 |            |
| Cash Contributions                           | 1,845,000  |            |                                                         |                                 |            |
| Other Costs                                  | 0          |            |                                                         |                                 |            |
| Reimbursements                               | 939,000    |            |                                                         |                                 |            |
| Total Est. Programmed Construction Cost      |            | 39,297,000 |                                                         |                                 |            |
| Total Est. Unprogrammed Construction Cost    |            | 7,399,000  |                                                         |                                 |            |
| Total Estimated Cost                         |            | 46,696,000 |                                                         |                                 |            |

Division: South Atlantic

Division: Mobile

Gulfport Harbor, MS

3 April 2001

100

JUSTIFICATION: Channel deepening and widening, with minor relocation, is required to provide a safe and efficient harbor for the present and anticipated future vessel traffic at Gulfport Harbor. Reducing the width of the turning basin would provide for dockside berths to be maintained by local interests and enlarging the entrance would reduce hazards resulting from cross currents and improve maneuvering. Channel improvements are needed in order to more fully load vessels and provide safe navigation through several bends in the channel at the barrier islands. A 10-year average of total commerce is 1.2 million short tons, of which 92 percent are exports and imports. With the proposed project, the major imports will be fruit and general products (containers). All bulk commodities will be exported/imported on 35,000 to 42,000 dead weight dry bulk carriers drafting 30 to 35 feet. The savings per ton for tons for vessels operating on a 36-foot channel are as follows: ilmenite ore (\$4.94); scrap metal (\$2.02); fishmeal (\$2.79); fresh fruit (\$.75); and general cargo (\$1.03). Project benefits will be generated by more fully loading the existing vessels calling at the port. The average annual benefits are \$4,937,000, all or commercial navigation.

FISCAL YEAR 2002: The requested amount will be applied as follows:

|                                  |           |
|----------------------------------|-----------|
| Planning, Engineering and Design | \$100,000 |
| Total                            | \$100,000 |

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

| Requirements of Local Cooperation                                                                                                                     | Payments<br>During<br>Construction<br>And<br>Reimbursements | Annual<br>Operation,<br>Maintenance,<br>Repair,<br>Rehabilitation,<br>And<br>Replacement<br>Costs |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| PHASE I:                                                                                                                                              |                                                             |                                                                                                   |
| Pay 25% of the cost allocated to general navigation facilities during construction.                                                                   | \$8,639,000                                                 | \$ 0                                                                                              |
| Reimburse an additional 10% of the costs allocated to general navigation facilities within a period of 30 years following completion of construction. | 3,455,000                                                   | 0                                                                                                 |
| Pay 100% of the cost allocated to berthing area dredging (without credit).                                                                            | \$2,603,000                                                 | 0                                                                                                 |

Requirements of Local Cooperation (Continued)

REMAINDER:

|                                                                                                                                                                               |           |   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|---|
| Pay 25% of the costs allocated to general navigation facilities during construction.                                                                                          | 2,345,000 | 0 |
| Reimburse an additional 10 % of the costs of general navigation features allocated to commercial navigation within a period of 30 years following completion of construction. | 939,000   | 0 |

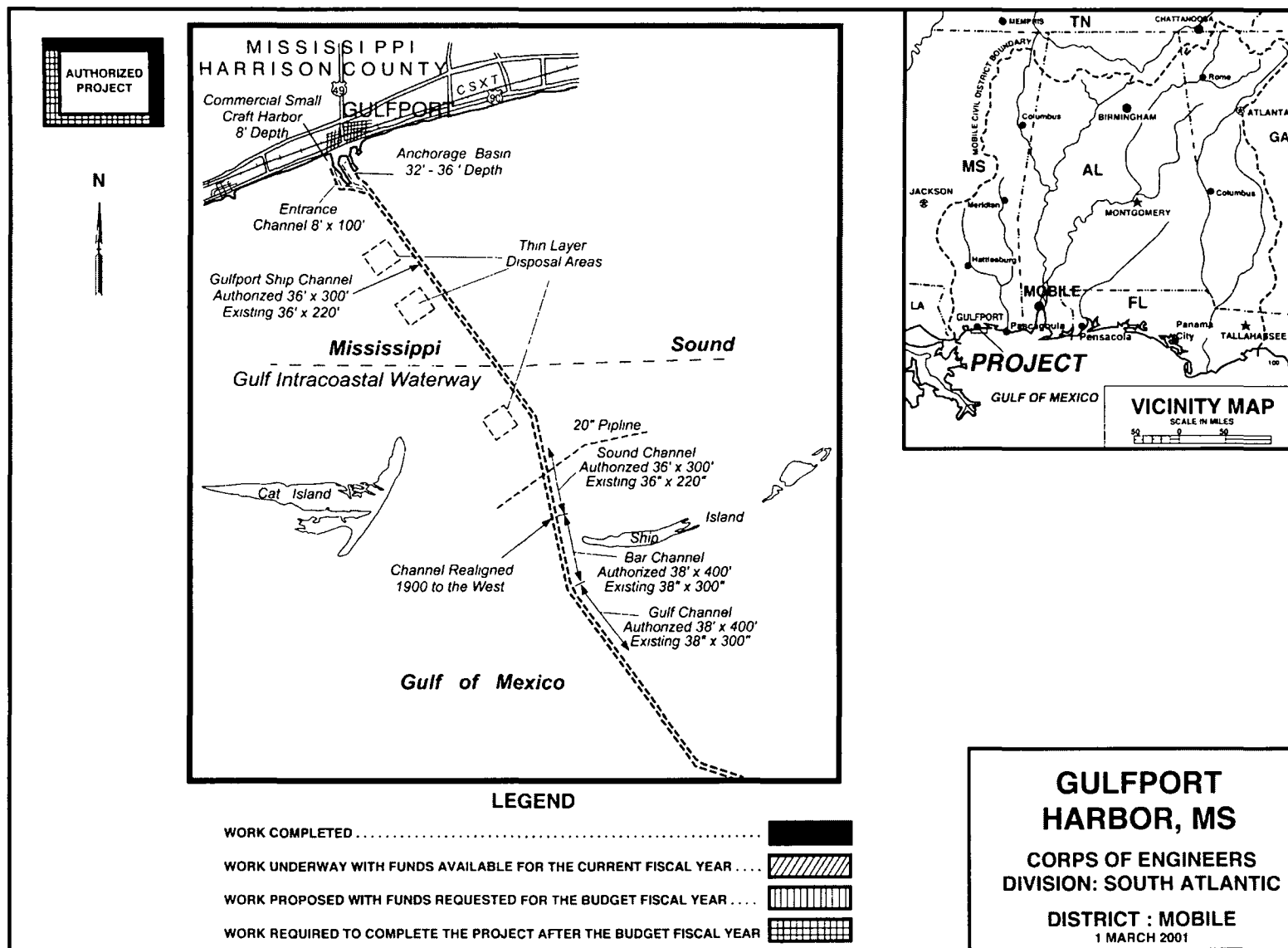
STATUS OF LOCAL COOPERATION: The local sponsor is the Mississippi State Port Authority at Gulfport, Mississippi. The Project Cooperation Agreement (PCA) for dredging of Phase I was signed in June 1990. The PCA execution for the remainder has not been scheduled.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal (Corps) cost estimate is \$32,948,500 which is the same as the last presented to Congress (FY 95).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final Environmental Impact Statement was filed with the Environmental Protection Agency on 13 July 1990.

SUMMARIZED FINANCIAL DATA FOR REMAINDER:

|                                                 |             |
|-------------------------------------------------|-------------|
| Estimated Appropriation Requirements (COE)      | \$7,033,000 |
| Estimated Appropriation Requirements (U.S.C.G.) | 21,000      |
| Estimated Total Appropriation Requirements      | 7,054,000   |
| Future non-Federal Reimbursement                | 939,000     |
| Estimated Federal Cost (Ultimate)(COE)          | 6,094,000   |
| Estimated Non-Federal Cost                      | 3,284,000   |
| Cash Contributions                              | 2,345,000   |
| Other Costs                                     | 0           |
| Reimbursements                                  | 939,000     |
| Total Estimated Project Cost                    | \$9,399,000 |



APPROPRIATION: Construction, General - Channels and Harbors (Navigation)

PROJECT: Pascagoula Harbor, Mississippi (Continuing)

LOCATION: Pascagoula Harbor project is located on the Gulf Coast, at Pascagoula, in Jackson County, Mississippi, about 100 miles east of New Orleans, Louisiana, and 32 miles west of the entrance to Mobile Harbor, Alabama. The deep draft ship channel runs southward from Pascagoula through Mississippi Sound into deep water in the Gulf of Mexico.

DESCRIPTION:

PHASE I (COMPLETED): Constructed a new turning basin at the present project depth of 38 feet at the mouth of Bayou Casotte, widened the Gulf approach channel to 450 feet and the Horn Island Pass Channel to 600 feet, and relocated the Horn Island Pass 300 feet to the west.

PHASE II: The proposed plan of improvement is to widen the Bayou Casotte Channel from the junction with the Lower Pascagoula Channel to the mouth of Bayou Casotte to 350 feet; deepen the Bar Channel from its origin in the Gulf, the 44 foot contour (MLLW), to the transition at the north end of Horn Island Pass to 44 feet, the nominal 42-foot project depth with 2 feet of additional depth as an allowance for wave action; deepen the Lower Pascagoula and Bayou Casotte Channels to 42 feet; deepen the turning basin located at the mouth of the Bayou Casotte Harbor and the 1,200-foot project extension north of the turning basin to 42 feet; and deepen the two impoundments along the east side of Horn Island Pass and the Bar Channel to 44 feet. Construct a 168 acre dredged material disposal facility.

*An additional phase of the authorized project will be constructed as related to priority of needs and the non-federal sponsor's willingness and capability to participate. The additional phase of work is currently unprogrammed.*

AUTHORIZATION: Water Resources Development Act of 1986.

REMAINING BENEFIT-REMAINING COST RATIO: 1.8 to 1 at 7 5/8 percent for Phase II.

TOTAL BENEFIT-COST RATIO: 1.14 to 1 at 8 ½ percent for Phase I; 0.8 to 1 at 7 5/8 percent for Phase II.

INITIAL BENEFIT-COST RATIO: 1.14 to 1 at 8 ½ (FY 1994) for Phase I; 1.2 to 1 at 7 5/8 percent (FY 1998) for Phase II.

BASIS OF BENEFIT-COST RATIO: Benefits for Phase I are from the General Design Memorandum approved in June 1992 at October 1991 price levels.  
Benefits for Phase II are from the Limited Reevaluation Report prepared in April 1997 at October 1997 price levels.



| SUMMARIZED FINANCIAL DATA                    |            |              |                                                                                                                                                | ACCUM PCT<br>OF EST<br>FED COST |                  |
|----------------------------------------------|------------|--------------|------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|------------------|
| Estimated Appropriation Requirements (COE)   |            | \$47,789,000 | Allocation to 30 September 2000                                                                                                                | \$24,873,000                    |                  |
| Programmed Construction                      | 39,412,000 |              | Conference Allowance for FY 2001                                                                                                               | 6,663,000                       |                  |
| Unprogrammed Construction                    | 8,377,000  |              | Allocation for FY 2001                                                                                                                         | 5,584,000                       | 1/               |
| Estimated Appropriation Requirement U.S.C.G) |            | 736,000      | Allocation Through FY 2001                                                                                                                     | 30,457,000                      | 64               |
| Programmed Construction                      | 688,000    |              | Allocation Requested for FY 2002                                                                                                               | 1,930,000                       | 68               |
| Unprogrammed Construction                    | 48,000     |              | Programmed Balance to Complete                                                                                                                 |                                 |                  |
| Estimated Total Appropriation Requirement    |            | 48,525,000   | after FY 2002                                                                                                                                  | 7,025,000                       | 82               |
| Programmed Construction                      | 40,100,000 |              | Unprogrammed Balance to Complete                                                                                                               |                                 |                  |
| Unprogrammed Construction                    | 8,425,000  |              | after FY 2002                                                                                                                                  | 8,377,000                       | 100              |
| Non-Federal Reimbursement                    |            | 6,372,000    | 1/ Reflects \$1,066,000 reduction as savings and slippage and \$13,000 rescinded in accordance with the Consolidated Appropriations Act, 2001. |                                 |                  |
| Programmed Construction                      | 5,255,000  |              |                                                                                                                                                |                                 |                  |
| Unprogrammed Construction                    | 1,117,000  |              |                                                                                                                                                |                                 |                  |
| Estimated Federal Cost (Ultimate)(COE)       |            | 41,417,000   |                                                                                                                                                |                                 |                  |
| Programmed Construction                      | 34,157,000 |              | STATUS                                                                                                                                         | PERCENT                         | PHYSICAL         |
| Unprogrammed Construction                    | 7,260,000  |              | (1 Jan 2001)                                                                                                                                   | COMPLETE                        | COMPLETION       |
| Estimated Non-Federal Cost                   |            | 27,547,000   | Construction                                                                                                                                   |                                 |                  |
| Programmed Construction                      | 23,638,000 |              | Phase I                                                                                                                                        | 100                             | Sep 1996         |
| Cash Contributions                           | 13,137,000 |              | Phase II                                                                                                                                       | 70                              | Being determined |
| Other Costs                                  | 5,246,000  |              | Remainder                                                                                                                                      | 0                               | Indefinite       |
| Reimbursements                               | 5,255,000  |              | Entire Project                                                                                                                                 | 64                              | Indefinite       |
| Unprogrammed Construction                    | 3,909,000  |              |                                                                                                                                                |                                 |                  |
| Cash Contributions                           | 2,792,000  |              |                                                                                                                                                |                                 |                  |
| Other Costs                                  | 0          |              |                                                                                                                                                |                                 |                  |
| Reimbursements                               | 1,117,000  |              |                                                                                                                                                |                                 |                  |
| Total Est. Programmed Construction Cost      |            |              |                                                                                                                                                |                                 |                  |
| Total Est. Unprogrammed Construction Cost    | 58,483,000 |              |                                                                                                                                                |                                 |                  |
| Total Estimated Cost                         | 11,217,000 |              |                                                                                                                                                |                                 |                  |
|                                              | 69,700,000 |              |                                                                                                                                                |                                 |                  |

Division: South Atlantic

Division: Mobile

Pascagoula Harbor, MS

3 April 2001

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## JUSTIFICATION:

Pascagoula Harbor is located on the Gulf Coast at Pascagoula, Mississippi, in Jackson County. This deep-draft ship channel has a total length of 17.5 miles from the Pascagoula Inner Harbor to deep water in the Gulf of Mexico. The port is essential to the economy of the state and to Jackson County, the state's most industrialized county. The Pascagoula River channel serves Ingalls Shipbuilding, a grain elevator, the Navy Homeport and numerous lumber and breakbulk shippers. The Bayou Casotte Channel serves the Chevron refinery, the nation's seventh largest crude oil refinery. The channel also serves Mississippi Phosphates, Halter Marine, and numerous breakbulk shippers from port facilities in the inner harbor. The Phase II evaluation includes deepening the entrance channel and Horn Island Pass including associated impoundment basins to 44 feet, deepening the Lower Pascagoula Channel to 42 feet, deepening and widening the Bayou Casotte Channel to 42 feet and 350 feet, respectively, terminating approximately 1,200 feet north of the southern turning basin which will also be deepened to 42 feet. Recommended project modifications would allow crude oil and petroleum coke vessels to load to deeper drafts realizing economies of scale. In addition, Halter Marine and Ham Marine, whose facilities to be constructed at Bayou Casotte Harbor are dependent upon channel widening, will be able to service/build larger oil drilling rigs which are increasingly becoming industry standard. Benefits attributed to channel deepening and widening total \$2,571,998 annually. Crude oil imports benefiting from channel widening will total 13,839,874 short tons annually, while petroleum coke exports will total 1,317,650 short tons annually. With a 350-foot wide Bayou Casotte Channel, the number of drill rigs serviced/built annually will range from 18 in the year 2000 to 23 by the year 2050.

Maintenance dredging of those segments of the federal project within Mississippi Sound is performed by pipeline or mechanical dredge. The disposal area at Greenwood Island has been determined to be unsuitable for continued use and a new site is currently being developed at the former Tenneco Site on the eastern shore of Bayou Casotte. This new site will replace all the functions of the Greenwood Island site. Material dredged from the mouth of Pascagoula River and Bayou Casotte southward is placed in open water disposal areas west of the channels. Provisions have also been made for placing this material in the Pascagoula Ocean Dredged Material Disposal Site (ODMDS) in the Gulf of Mexico on an as needed basis. Maintenance dredging in the Horn Island Pass is performed on an as needed basis with maintenance material being placed in adjacent Disposal Area 10, the littoral zone disposal area, and in the ODMDS. The average annual benefits for the Phase II project are \$2,571,998 all for commercial navigation.

FISCAL YEAR 2002: The requested amount will be applied as follows:

|                                                     |              |
|-----------------------------------------------------|--------------|
| Initiate Construction of Confined Disposal Facility | \$ 1,530,000 |
| Planning, Engineering and Design                    | 200,000      |
| Construction Management                             | 200,000      |
| Total                                               | \$ 1,930,000 |

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

| Requirements of Local Cooperation                                                                                                                                                                                                                                                      | Payments<br>During<br>Construction<br>and<br>Reimbursement | Annual<br>Operation,<br>Maintenance,<br>Repair,<br>Rehabilitation,<br>and<br>Replacement<br>Costs |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| PHASE I:                                                                                                                                                                                                                                                                               |                                                            |                                                                                                   |
| Pay 25% of the cost allocated to general navigation facilities during construction.                                                                                                                                                                                                    | \$3,352,000                                                | 0                                                                                                 |
| Reimburse an additional 10% of the costs allocated to general navigation facilities within a period of 30 years following completion of construction.                                                                                                                                  | 1,341,000                                                  | 0                                                                                                 |
| PHASE II:                                                                                                                                                                                                                                                                              |                                                            |                                                                                                   |
| Modify or relocate pipeline facility where necessary for the construction of the project.                                                                                                                                                                                              | 4,086,000                                                  | 0                                                                                                 |
| Pay 25% of the costs allocated to general navigation facilities during construction.                                                                                                                                                                                                   | 9,785,000                                                  | 0                                                                                                 |
| Pay 100% of the cost allocated to berthing area dredging (without credit).                                                                                                                                                                                                             | 526,000                                                    | 0                                                                                                 |
| Provide lands easements, rights of way, for dredged material disposal facility.                                                                                                                                                                                                        | 634,000                                                    | 0                                                                                                 |
| Reimburse an additional 10 % of the costs of general navigation features allocated to commercial navigation within a period of 30 years following completion of construction, as entirely reduced by a credit allowed for the value of relocations provided for commercial navigation. | 3,914,000                                                  | 0                                                                                                 |

| Requirements of Local Cooperation (Continued)                                                                                                                                                                                                                                       | Payments<br>During<br>Construction<br>and<br>Reimbursements | Annual<br>Operation,<br>Maintenance,<br>Repair,<br>Rehabilitation,<br>and<br>Replacement<br>Costs |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| REMAINDER:                                                                                                                                                                                                                                                                          |                                                             |                                                                                                   |
| Pay 25% of the cost allocated to general navigation facilities during construction.                                                                                                                                                                                                 | 2,792,000                                                   | 0                                                                                                 |
| Reimburse an additional 10% of the costs of general navigation features allocated to commercial navigation within a period of 30 years following completion of construction, partially reduced by a credit allowed for the value of relocations provided for commercial navigation. | 1,117,000                                                   | 0                                                                                                 |
| Total Non-Federal Costs                                                                                                                                                                                                                                                             | \$ 27,547,000                                               | 0                                                                                                 |

The non-Federal sponsor has agreed to make all required payments concurrently with project construction and reimburse its share of construction costs within a period of 30 years following completion of construction.

STATUS OF LOCAL COOPERATION: The local sponsor for Phase II is the Jackson County Port Authority (JCPA) at Pascagoula, Mississippi. The Project Cooperation Agreement (PCA) for dredging was signed in April 1999. The Mississippi State Legislature passed House Bill 1681 to issue general obligation bonds for improvements at the Port of Pascagoula to be used towards the Non-Federal share of the project.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal (Corps) cost estimate of \$47,789,000 is an increase of \$688,000 from the latest estimate of (\$47,101,000) presented to Congress (FY 2001). This change includes the following items:

| Item                                                                                        | Amount            |
|---------------------------------------------------------------------------------------------|-------------------|
| Price Escalation on Construction Features                                                   | +\$548,000        |
| Post Contract Award and Other Estimating Adjustments<br>(including contingency adjustments) | <u>+\$140,000</u> |
| Total                                                                                       | +\$688,000        |

Division: South Atlantic

Division: Mobile

Pascagoula Harbor, MS

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**STATUS OF ENVIRONMENTAL IMPACT STATEMENT:** In accordance with the requirements of the National Environmental Policy Act (NEPA) the Final Environmental Impact Statement (FEIS) for Pascagoula Harbor, Mississippi Navigation Improvements was filed with the Council on Environmental Quality on July 12, 1985. The State of Mississippi, Office of the Governor concurred with the FEIS by letter dated August 20, 1985. The Record of Decision (ROD) for commercial navigation improvements, Pascagoula Harbor, was signed by the U.S. Army Corps of Engineers, Director of Civil Works, July 24, 1992.

The FEIS addressed impacts associated with proposed channel improvements consisting of dredging approximately 14 million cubic yards of material for new work activities including deepening and widening the entrance channel to 44 feet by 550 feet from the Gulf of Mexico to the southern end of Horn Island Pass, then continuing the 44-foot depth through Horn Island Pass at a width of 600 feet with reconfiguration of the impoundment basin on Horn Island Pass to provide a 56-foot deep by 1500-foot long section within the channel limits. Within the Mississippi Sound and into the Pascagoula River, the channel would be deepened to 42 feet at the existing width of 350 feet. The channel into Bayou Casotte would be widened to 350 feet and deepened to 42 feet. Also included was a new 1,150-foot diameter turning basin just inside the mouth of Bayou Casotte.

New work material from the Pascagoula River inner harbor would be deposited in the Environmental Protection Agency (EPA) designated ocean dredged material disposal site (ODMDS) located approximately 3 miles south of Horn Island. New work material from the mouth of the Pascagoula River to the north end of Horn Island Pass and all of the Bayou Casotte channel material would also be disposed in the ODMDS. New work and maintenance material dredged from the entrance channel, including Horn Island Pass, would be disposed in a near-shore area between the -15 and -30 foot depth contours south of Horn Island and in the ODMDS.

The FEIS stipulated that maintenance material from the Pascagoula River channel would be placed in existing Triple Barrel disposal site and the expanded disposal area on Singing River Island. Maintenance material from Bayou Casotte would be placed in the Greenwood Island upland disposal site. Maintenance material from all channel segments within Mississippi Sound would be placed in previously used open water placement sites in Mississippi Sound. Since completion of the FEIS, the disposal area at Singing River Island has been utilized for the development of Naval Station Pascagoula. Future use of this area has been determined to best be associated with the expansion of the Naval Station or other military related uses. Placement of material from the channel segment that previously was deposited on Singing River Island is currently scheduled for the ocean dredged material disposal site until the dredged material management plan is revised. Greenwood Island was determined to be unsuitable for the continued placement of dredged material due to site contamination issues. This site has been replaced by the Bayou Casotte Dredged Material Placement Site on the former TENNECO site located directly across the channel from Greenwood Island. The dredged material management plan has been modified to accommodate this change.

The U.S. Environmental Protection Agency completed an FEIS in July 1991 designating the Pascagoula Ocean Dredged Material Disposal Site. This FEIS addressed impacts for the designation and use of the ODMDS and the transportation and placement of approximately 1 million cubic yards of maintenance material to be dredged by the U.S. Navy from the Upper Pascagoula segment of the Pascagoula Harbor navigation project (prior to channel improvements) and the approximately 12 million cubic yards of new work to be dredged from the construction of authorized improvements for the project.

**OTHER INFORMATION:** Funds to initiate preconstruction engineering and design for the total project were appropriated in FY 1987. A Limited Reevaluation Report for Phase II was completed in July 1997. There are Fish and Wildlife Facilities scheduled to be constructed with the Phase II portion of the project. Their cost will be \$3,325,000. These funds will be used for wetland mitigation, specifically for geotubes for bank protection and wetland creation.

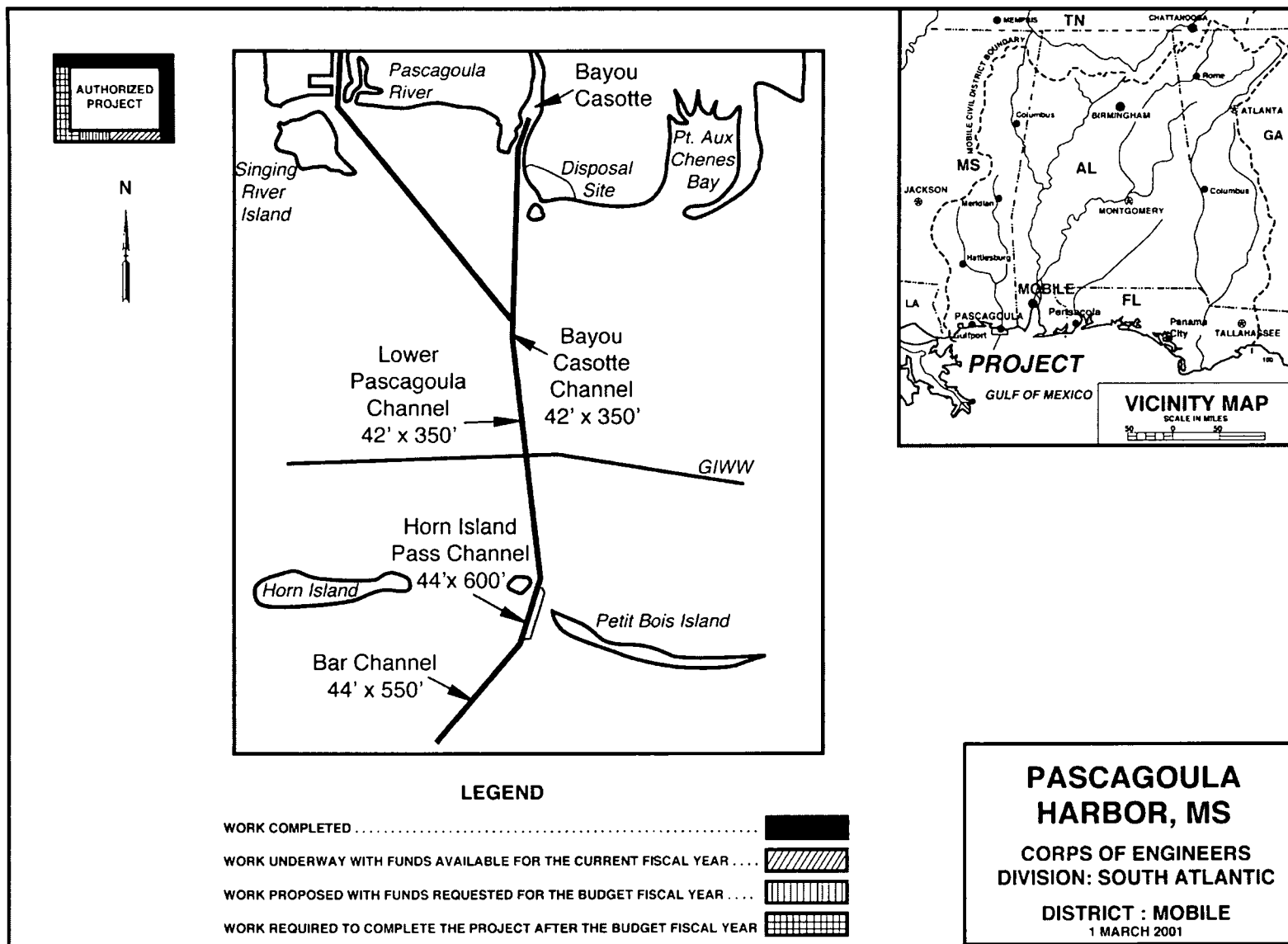
Phase II:

SUMMARIZED FINANCIAL DATA FOR PHASE II:

|                                                 |              |
|-------------------------------------------------|--------------|
| Estimated Appropriation Requirements (COE)      | \$29,355,000 |
| Estimated Appropriation Requirements (U.S.C.G.) | 52,000       |
| Estimated Total Appropriation Requirements      | 29,407,000   |
| Future non-Federal Reimbursement                | 3,914,000    |
| Estimated Federal Cost (Ultimate)(COE)          | 25,441,000   |
| Estimated Non-Federal Cost                      | 18,945,000   |
| Cash Contributions                              | 9,785,000    |
| Other Costs                                     | 5,246,000    |
| Reimbursements                                  | 3,914,000    |
| Total Estimated Project Cost                    | \$44,438,000 |

REMAINING BENEFIT-REMAINING COST RATIO: 1.8 to 1 at 7 5/8 percent.

TOTAL BENEFIT-COST RATIO: 0.8 to 1 at 7 5/8 percent.



APPROPRIATION TITLE: Construction, General - Channel and Harbors (Navigation)

PROJECT: Wilmington Harbor, North Carolina (Continuing)

LOCATION: The project is located at Wilmington on the southeastern coast of North Carolina in New Hanover and Brunswick Counties.

DESCRIPTION: The project consists of two separable elements, the portion for deepening of the existing project and the portion for raising the dikes on Eagle Island dredged material disposal facility (DMDF) for maintenance of the existing project until the deepening is completed. The plan of improvement consists of deepening the ocean bar and entrance channels from the authorized depth of 40 feet to 44 feet; deepening the authorized 38-foot project to 42 feet up to and including the anchorage basin immediately upriver from the State Ports Authority dock, and extending the anchorage basin northward by 300 feet; widening the existing 400-foot wide channel to 600 feet over a total length of 6.2 miles including Lower and Upper Midnight and Lower Lilliput reaches; widen five turns and bends by 100 to 200 feet providing a total average channel width of 500 to 675 feet; widening the Fourth East Jetty Channel to 500 feet over a total length of 1.5 miles; deepening the 32-foot channel between Castle Street and the Hilton Railroad Bridge, the 32-foot turning basin just above the mouth of the Northeast Cape Fear River on the west side, and the 25-foot channel from the Hilton Railroad Bridge to 750 feet upstream all to a depth of 38 feet; deepening the 25-foot channel from 750 feet upstream of the Hilton Railroad Bridge to the turning basin near the upstream limits of the project to 34 feet, along with widening of the channel from 200 to 250 feet; and widening the turning basin from 700 to 800 feet; mitigation to include acquiring, by fee title, 30 acres of upland and construction of an embayment and acquisition of about 700 acres of existing marsh and upland areas for preservation of habitat to offset losses of wetlands and primary nursery areas. The plan of improvement for the dredged material disposal facility consists of incrementally raising the dikes of three cells on Eagle Island confined disposal facility from their current elevations to 25,29,32,35,38 and 40 feet.

AUTHORIZATION: Water Resources Development Acts of 1986 and 1996, Rivers and Harbors Acts of 1945 and 1962 and the River and Harbor Act of 1960, as amended (Section 107).

REMAINING BENEFIT-REMAINING COST RATIO: 1.5 to 1 at 7-5/8 percent (deepening portion); N/A (DMDF Portion)

TOTAL BENEFIT-COST RATIO: 1.3 to 1 at 7-5/8 percent (deepening portion); N/A (DMDF Portion)

INITIAL BENEFIT - COST RATIO: 1.3 to 1 at 7-5/8 percent (deepening portion); N/A (DMDF Portion)

BASIS OF BENEFIT-COST RATIO: Benefits for the deepening portion are from the latest available evaluation contained in the feasibility report dated June 1996 at October 1995 price levels for the previous Cape Fear-Northeast Cape Fear River project, in the General Design Memorandum Supplement dated February 1994 at October 1993 price levels for the previous Wilmington Harbor-Northeast Cape Fear River project and in the feasibility report dated March 1994 at October 1992 price levels for the previous Wilmington Harbor Channel Widening project. Project feasibility for the DMDF portion is based on the original project authorization and the method of disposal of the dredged material is based on the least cost alternative as shown in the decision report approved 1 September 1998.



| SUMMARIZED FINANCIAL DATA                      |               | ACCUM<br>PCT OF<br>EST<br>FED COST | PHYSICAL<br>STATUS<br>(1 Jan 2001)                      | PERCENT<br>COMPLETE | PHYSICAL<br>COMPLETION<br>SCHEDULE |
|------------------------------------------------|---------------|------------------------------------|---------------------------------------------------------|---------------------|------------------------------------|
| Estimated Appropriation Requirement (COE)      | \$248,100,000 |                                    | Deepening Portion                                       | 9                   | Being<br>Determined                |
| Estimated Appropriation Requirement (OFA)      | 1,678,000     |                                    | Dredged Material<br>Disposal Facility<br>(DMDF) Portion | 9                   | Being<br>Determined                |
| Estimated Total Appropriation Requirement      | 249,778,000   |                                    | Entire Project                                          | 9                   | Being<br>Determined                |
| Future Non-Federal Reimbursement               | 27,000,000    |                                    |                                                         |                     |                                    |
| Estimated Federal Cost (Ultimate)              | 227,778,000   |                                    |                                                         |                     |                                    |
| Estimated Non-Federal Cost                     | 154,622,000   |                                    |                                                         |                     |                                    |
| Cash Contributions                             | 82,900,000    |                                    |                                                         |                     |                                    |
| Other Costs                                    | 44,722,000    |                                    |                                                         |                     |                                    |
| Reimbursements                                 | 27,000,000    |                                    |                                                         |                     |                                    |
| Navigation                                     | 27,000,000    |                                    |                                                         |                     |                                    |
| Total Estimated Project Cost                   | \$377,400,000 |                                    |                                                         |                     |                                    |
| Allocations to 30 September 2000               | 24,644,000    |                                    |                                                         |                     |                                    |
| Conference Allowance for FY 2001               | 40,600,000    |                                    |                                                         |                     |                                    |
| Allocation for FY 2001                         | 34,024,000    | <u>1/</u>                          |                                                         |                     |                                    |
| Allocations through FY 2001                    | 58,668,000    |                                    |                                                         | 24                  |                                    |
| Allocation Requested for FY 2002               | 43,159,000    |                                    |                                                         | 41                  |                                    |
| Programmed Balance to Complete After FY 2002   | 146,273,000   |                                    |                                                         |                     |                                    |
| Unprogrammed Balance to Complete After FY 2002 | 0             |                                    |                                                         |                     |                                    |

1/Reflects \$6,496,000 reduction assigned as savings and slippage and \$80,000 rescinded in accordance with the Consolidated Appropriations Act, 2001.

## PHYSICAL DATA

| Channels and Basins                                                                                                                    | Length     | Width      | Depth   |
|----------------------------------------------------------------------------------------------------------------------------------------|------------|------------|---------|
| Ocean Bar and Entrance Channel                                                                                                         | 8.5 miles  | 500 feet   | 44 feet |
| River Channel to mile 27.5                                                                                                             | 24.8 miles | 400 feet   | 42 feet |
| Passing Lane                                                                                                                           | 6.2 miles  | 200 feet   | 42 feet |
| Turns and Bends – widen five turns and bends by 100 to 200 feet providing a total average navigation channel width of 500 to 675 feet. |            |            |         |
| Anchorage Basin                                                                                                                        | 1600 feet  | 1,200 feet | 42 feet |
| Fourth East Jetty                                                                                                                      | 1.5 miles  | 500 feet   | 42 feet |
| Castle Street to NC 133 Bridge                                                                                                         | 1.7 miles  | 400 feet   | 38 feet |
| NC 133 Bridge to Hilton RR Bridge                                                                                                      | 0.5 miles  | 300 feet   | 38 feet |
| Hilton RR Bridge Upstream                                                                                                              | 750 feet   | 200 feet   | 38 feet |
| Turning Basin #1                                                                                                                       | 750 feet   | 750 feet   | 38 feet |
| Channel from 750 feet upstream of Hilton RR Bridge to mile 30.5                                                                        |            |            |         |
| Turning Basin #2                                                                                                                       | 1.3 miles  | 250 feet   | 34 feet |
|                                                                                                                                        | 550 feet   | 800 feet   | 34 feet |

Mitigation - Acquire 30 acres of upland and construction of an embayment and acquisition of 700 acres to offset losses of wetlands and primary nursery area.

Incremental dike raising of cells 1,2, and 3 on Eagle Island to elevations 25,29,32,35, 38 and 40 feet.

**JUSTIFICATION:** The existing Wilmington Harbor project averaged 7,999,400 tons of waterborne commerce for the period 1995-1999. The recommended project would result in substantial savings ranging from \$0.57 to \$13.00 per ton in transportation and handling costs on certain commodities. The largest savings would be \$13.00 per ton on liquefied gas followed by chrome ore at \$6.88. The major commodities imported through the port are salt, chrome ore, fertilizer materials, basic chemicals, asphalt, alcohols and cement with major exports being tobacco, wood pulp and DMT fibers. It is estimated that each passing situation necessitates an average delay of approximately 25 minutes for each vessel in order to pass in the safest reaches of the river resulting in increased costs of vessel operation. Construction of the 6.2 mile passing lane will eliminate 85 percent of such delays and provide increased speeds in transit. Widening the five turns will result in an average savings of 15 minutes in vessel operating time for each transit of the river. The current 38-foot project could handle vessels in the 25,000 to 40,000 ton class while the 42-foot project could handle vessels in the 35,000 to 60,000 ton class. The current 32-foot channel can handle vessels in the 25,000 ton class while the recommended 38-foot channel will handle vessels in the 40,000 ton class. Recently completed investments in container facilities, regional highway improvements, airport facilities, and refrigerated warehouse storage will result in greater opportunities for growth. The Wilmington Harbor Ocean Dredged Material Disposal Site (ODMDS) is available for the lower reaches, an existing disposal site, Eagle Island is available for the middle reach and the State is acquiring a site at Point Peter from New Hanover County for the upper reach of the project. Eagle Island dikes are being raised to increase capacity for the middle reach. Since these dredging

JUSTIFICATION (continued):

costs would be incurred every year, they represent the equivalent average annual cost of this operation and can therefore be compared directly to the equivalent annual cost associated with the Eagle Island Dike plan. This comparison resulted in the dike raising being the least costly alternative. The recommended improvements are essential to the economic welfare of New Hanover County and the surrounding area. Average annual benefits are as follows:

| Annual Benefits           | Amount           |
|---------------------------|------------------|
| Commercial Navigation     | \$34,102,000     |
| Environmental Enhancement | (not quantified) |
| Total                     | \$34,102,000     |

FISCAL YEAR 2002: The requested amount of \$43,159,000 will be applied as follows:

|                                                                       |              |
|-----------------------------------------------------------------------|--------------|
| Continue Channel Dredging Contracts for deepening portion             | \$39,359,000 |
| Initiate Dike Raising Cell 1-4, to elevation 29 feet for DMDF portion | 1,917,000    |
| Complete Dike Raising Cells 1,2&3 Site Management for DMDF Portion    | 184,000      |
| Planning, Engineering, and Design for deepening portion               | 100,000      |
| Planning, Engineering, and Design for DMDF portion                    | 273,000      |
| Construction Management for deepening portion                         | 1,200,000    |
| Construction Management for DMDF portion                              | 126,000      |
| Total                                                                 | \$43,159,000 |

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1996, the non-Federal sponsor must comply with the requirements listed below:

| Requirements of local Cooperation                                                                                                                                                                                                                                                                        | Payments During Construction and Reimbursements | Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|------------------------------------------------------------------------------|
| Separable Element (Deepening Portion):                                                                                                                                                                                                                                                                   |                                                 |                                                                              |
| Provide lands, easements, rights of way, and dredged material disposal area lands.                                                                                                                                                                                                                       | \$ 1,915,000                                    | \$6,000                                                                      |
| Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities where necessary for the construction of the project.                                                                                                                                                        | 19,595,000                                      |                                                                              |
| Pay 25 percent of the costs allocated to deep draft navigation during construction.                                                                                                                                                                                                                      | 71,600,000                                      |                                                                              |
| Provide and maintain, at its own expense, the local service facilities necessary to realize the benefits of the general navigation features.                                                                                                                                                             | 23,212,000                                      |                                                                              |
| Reimburse an additional 10 percent of the costs allocated to general navigation facilities within a period of 30 years following completion of construction, as partially reduced by a credit allowed for the value of lands, easements, rights of way, relocations and dredged material disposal areas. | 27,000,000                                      |                                                                              |
| Total Non-Federal Costs                                                                                                                                                                                                                                                                                  | \$143,322,000                                   | \$6,000                                                                      |

Separable Element (DMDF):

|                                                                                                                                  |               |     |
|----------------------------------------------------------------------------------------------------------------------------------|---------------|-----|
| Pay 25 percent of the cost of construction of the facilities                                                                     | \$ 11,300,000 |     |
| Reimburse an additional 10 percent of the costs of the facility within a period of 30 years following completion of construction | 4,540,000     |     |
| Total Non-Federal Costs                                                                                                          | \$15,840,000  | \$0 |

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction and reimburse its share of construction costs within a period of 30 years following completion of construction

Division: South Atlantic

District: Wilmington

Wilmington Harbor, NC

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#### STATUS OF LOCAL COOPERATION:

The State of North Carolina is the project sponsor. By letters dated 16 May 1996 and 24 April 1997 the State expressed support for the project and provided assurances of their intent to act as project sponsor and to sign a Project Cooperation Agreement (PCA) at the appropriate time. The State of North Carolina intends to seek appropriations from the General Assembly to fund its share of the project cost. The future reimbursement payment will be initiated in the year following completion of construction. The combined PCA was executed on 26 March 1999 for both elements. All work on the dredged material disposal facility prior to FY 00 was accomplished with advanced contributed funds under an agreement executed in July 1997. The future reimbursement for this element will be initiated in the year following the completion of the first dike raising.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps of Engineers) cost estimate of \$248,100,000 is the same as the last estimate (\$248,100,000) presented to Congress (FY 2001).

| Item                                                 | Amount        |
|------------------------------------------------------|---------------|
| Price Escalation on Construction Features            | +\$ 7,357,000 |
| Post Contract Award and Other Estimating Adjustments | - 7,357,000   |
| Total                                                | \$ 42,569,000 |

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The draft EIS for the deepening portion was filed with EPA in February 1996. The final EIS was filed with EPA in July 1996. 401 Certification was completed in October 1996. The final EIS for the DMDF portion was filed with EPA in July 1996. A Record of Decision was signed in December 1996. A Finding of No Significant Impact for design changes was signed in June 2000.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1987. The Wilmington Harbor, NC - 96 Act, and Wilmington Harbor, NC (Dredged Material Disposal Facilities) projects were combined in October 1998 to form this project.

Wilmington Harbor, NC - 96 Act - Deepening Portion

SUMMARIZED FINANCIAL DATA FOR SEPARABLE ELEMENTS:

|                                           |            |               |
|-------------------------------------------|------------|---------------|
| Estimated Appropriation Requirement (COE) |            | \$214,000,000 |
| Estimated Appropriation Requirement (OFA) |            | 1,678,000     |
| Estimated Total Appropriation Requirement |            | 215,678,000   |
| Estimated Federal Cost (Ultimate)         |            | 188,678,000   |
| Estimated Non-Federal Cost                |            | 143,322,000   |
| Cash Contributions                        | 71,600,000 |               |
| Other Costs                               | 44,722,000 |               |
| Reimbursements                            | 27,000,000 |               |
| Navigation                                | 27,000,000 |               |
| Total Estimated Project Cost              |            | \$332,000,000 |

REMAINING BENEFIT-REMAINING COST RATIO FOR PROGRAMMED SEPARABLE ELEMENTS: 1.5 to 1 at 7 5/8 percent.

TOTAL BENEFIT-COST RATIO FOR PROGRAMMED SEPARABLE ELEMENTS: 1.3 to 1 at 7 5/8 percent.

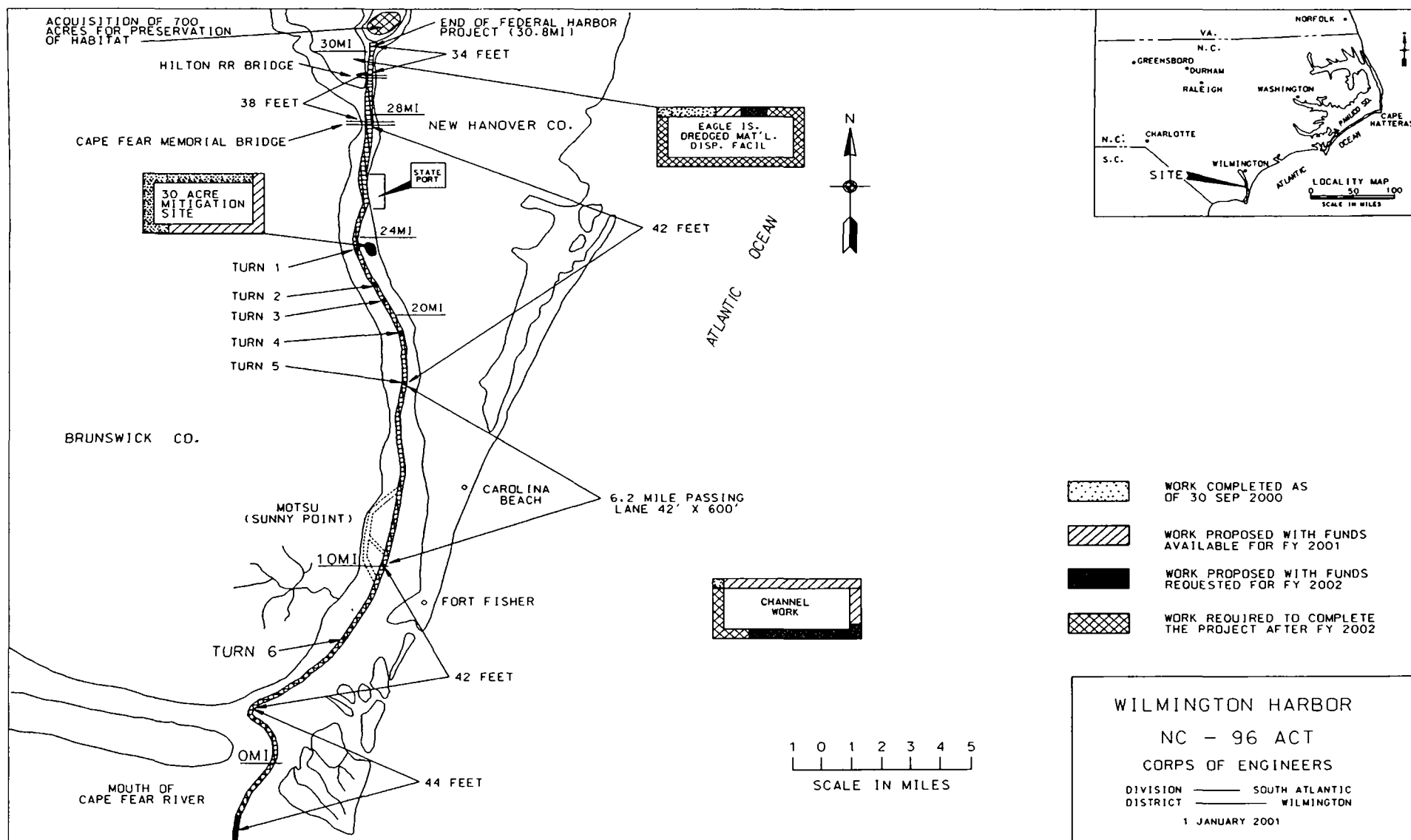
Wilmington Harbor, NC - Dredged Material Disposal Facilities Portion

SUMMARIZED FINANCIAL DATA FOR SEPARABLE ELEMENTS:

|                                           |             |              |              |
|-------------------------------------------|-------------|--------------|--------------|
| Estimated Total Appropriation Requirement |             |              | \$34,100,000 |
| Estimated Non-Federal Reimbursement       |             |              | 4,540,000    |
| Estimated Federal Cost (Ultimate)         |             |              | 29,560,000   |
| Estimated Non-Federal Cost                |             |              | 15,840,000   |
| Cash Contributions                        |             | \$11,300,000 |              |
| Other Costs                               |             | 0            |              |
| Reimbursements                            |             | 4,540,000    |              |
| Navigation                                | \$4,540,000 |              |              |
| Total Estimated Project Cost              |             |              | \$45,400,000 |

REMAINING BENEFIT-REMAINING COST RATIO FOR PROGRAMMED SEPARABLE ELEMENTS: Not Applicable.

TOTAL BENEFIT-COST RATIO FOR PROGRAMMED SEPARABLE ELEMENTS: Not Applicable.



Division: South Atlantic

District: Wilmington

Wilmington Harbor, NC

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APPROPRIATION TITLE: Construction, General - Channels and Harbors (Navigation)

PROJECT: Charleston Harbor (Deepening/Widening), South Carolina (Continuing)

LOCATION: Charleston Harbor is located on the coast of South Carolina about 15 miles south of the midpoint of the coastline, 165 miles south of Wilmington Harbor, North Carolina and 105 miles north of Savannah Harbor, Georgia.

DESCRIPTION: The plan of improvement is to deepen the Entrance Channel from 42 ft deep by 1000 ft wide to 47 ft deep x 800 ft wide and the inner channels from 40 ft deep to 45 ft deep. Realign/widen various channels/reaches, construct a new turning basin on the Cooper River, construct a new contraction dike, reconstruct two existing contraction dikes and remove the third existing contraction dike. All work is programmed.

AUTHORIZATION: Water Resources Development Act of 1996

REMAINING BENEFIT - REMAINING COST RATIO: 3.4 to 1 at 7 5/8 percent.

TOTAL BENEFIT - COST RATIO: 1.8 to 1 at 7 5/8 percent.

INITIAL BENEFIT - COST RATIO: 2.08 to 1 at 7-5/8 percent (FY 1998).

BASIS OF BENEFIT - COST RATIO: Benefits are from the Feasibility Report completed in Feb 1996 at 1995 price levels.

| SUMMARIZED FINANCIAL DATA                  | ACCUM<br>PCT OF<br>EST<br>FED COST | STATUS<br>(1 Jan 2001) | PERCENT<br>COMPLETE | PHYSICAL<br>COMPLETION<br>SCHEDULE |
|--------------------------------------------|------------------------------------|------------------------|---------------------|------------------------------------|
| Estimated Appropriation Requirement(COE)   | 98,444,000                         | Channels & Canals      |                     |                                    |
|                                            |                                    | Entrance Channel       | 75                  | Being determined                   |
| Estimated Appropriation Requirement (USCG) | 95,000                             | Inner Channels         | 40                  | Being determined                   |
|                                            |                                    | Turning Basin          | 0                   | Being determined                   |
| Estimated Total Appropriation Requirement  | 98,539,000                         | Contraction Dikes      | 99                  | Being determined                   |
| Future Non-Federal Reimbursement           | 13,106,000                         | Entire Project         | 60                  | Being determined                   |
| Estimated Federal Cost (Ultimate)          | 85,433,000                         |                        |                     |                                    |

Division: South Atlantic

District: Charleston

Charleston Harbor (Deepening/Widening), SC

3 April 2001

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| SUMMARIZED FINANCIAL DATA (Continued)          |            |             | ACCUM<br>PCT OF<br>EST<br>FED COST | STATUS<br>(1 Jan 2001) | PERCENT<br>COMPLETE | PHYSICAL<br>COMPLETION<br>SCHEDULE |
|------------------------------------------------|------------|-------------|------------------------------------|------------------------|---------------------|------------------------------------|
| Estimated Non-Federal Cost                     |            | 53,267,000  |                                    |                        |                     |                                    |
| Cash Contributions                             | 32,815,000 |             |                                    |                        |                     |                                    |
| Other Costs                                    | 7,346,000  |             |                                    |                        |                     |                                    |
| Reimbursements                                 | 13,106,000 |             |                                    |                        |                     |                                    |
| Deep Draft Navigation                          | 13,106,000 |             |                                    |                        |                     |                                    |
| Total Estimated Project Cost                   |            | 138,700,000 |                                    |                        |                     |                                    |
| Allocations to 30 September 2000               |            | 52,392,000  |                                    |                        |                     |                                    |
| Conference Allowance for FY 2001               |            | 16,227,000  |                                    |                        |                     |                                    |
| Allocation for FY 2001                         |            | 20,374,000  | 1/                                 |                        |                     |                                    |
| Allocations through FY 2001                    |            | 72,766,000  |                                    | 74                     |                     |                                    |
| Allocation Requested for 2002                  |            | 6,365,000   |                                    | 80                     |                     |                                    |
| Programmed Balance to Complete after FY 2002   |            | 19,408,000  |                                    |                        |                     |                                    |
| Unprogrammed Balance to Complete after FY 2002 |            | 0           |                                    |                        |                     |                                    |

1/ Reflects \$2,596,000 reduction assigned as savings and slippage, \$6,775,000 reprogrammed to the project, and \$32,000 rescinded in accordance with the Consolidated Appropriations Act, 2001.

#### PHYSICAL DATA

Entrance Channel - Deepen from 42 ft deep and 1000 ft wide to 47 ft and 800 ft wide for a distance of 16.3 miles. The remaining 200 ft width of the authorized channel will be maintained at 42 ft.

#### Inner Channels

Harbor and Wando Channel - Deepen from 40 ft to 45 ft.

Shipyard River Entrance Channel and Basin A - Deepen from 38 ft. to 45 ft.

Shutes/Folly Reach - Realign

Daniel Island Reach - Widen from continuous 600 ft to varying 600-875 ft.

Upper Town Creek Channel - Decrease from 40 ft deep by 500 ft wide channel to 16 ft deep by 250 ft wide.

Division: South Atlantic

District: Charleston

Charleston Harbor (Deepening/Widening), SC

3 April 2001

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### PHYSICAL DATA (Continued)

Turning Basin - Dredge a 45 ft deep turning basin 1400 ft x 1400 ft for the new Daniel Island Terminal.

Contraction Dikes - Construct a new contraction dike, reconstruct two existing dikes, and remove the third existing dike.

Disposal of approximately 37.9 million cubic yards of new material will be placed into either existing upland dredged material disposal sites or offshore disposal site. A significant diking effort will be required at the Clouter Creek upland disposal area

JUSTIFICATION: Charleston Harbor is the largest port in South Carolina and ranks first among container cargo ports on the Southeast and Gulf coasts, handling approximately 50 percent of all container tonnage among competing ports. The commerce in Charleston Harbor increased from 6,850,000 tons in 1982 to an estimated 11,200,000 tons in 1999. Container volume increased from 835,000 TEU in 1994 to 1,570,000 TEU in 2000. Shipments of containerized cargo have increased about 25 percent from the 1992 traffic base used in the feasibility report and currently exceed the projected traffic levels used in that analysis. Containerized cargo consists of textiles, chemical products, machinery, specialized clays, food products, frozen meats, plastic, and paper products. Charleston Harbor also has a significant amount of coal and petroleum products traffic. Petroleum products, chemicals, bauxite and non-ferrous ores are the major import commodities for Charleston Harbor. The largest ship that stops in Charleston is about 1,045 feet long and 137 feet wide with design drafts up to 47.5 ft and the bulk carriers have design drafts up to 49 ft. The Port's major customers, the shipping lines, are planning container ships as long as 1,100 feet and as wide as 150 feet and have already placed orders for 41 mega-container ships. Existing channel depths, widths, and alignments constrain the ability of vessels to utilize the port to their design capacity, increase transit time due to limited ability to pass except at designated locations, and/or present hazardous conditions. Vessels with deeper draft will be able to take advantage of a deeper channel and reduce transportation costs from tidal delays. Additional transportation savings will result from improved passing areas and alignments. Dredged material will be placed into either existing upland dredged material disposal sites or an offshore disposal site. Three upland disposal sites currently serve Charleston Harbor.

Average annual benefits are as follows:

| Annual Benefits       | Amount     |
|-----------------------|------------|
| Deep Draft Navigation | 21,634,000 |
| Total                 | 21,634,000 |

FISCAL YEAR 2002: The request amount will be applied as follows:

|                                       |             |
|---------------------------------------|-------------|
| Initiate construction on Upper Harbor | 2,646,000   |
| Complete construction on Lower Harbor | 2,129,000   |
| Diking                                | 1,100,000   |
| Engineering and Design                | 90,000      |
| Construction Management               | 400,000     |
| Total                                 | \$6,365,000 |

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

| Requirements of Local Cooperation                                                                                                                                                                                                                                                                                                   | Payments During Construction and Reimbursements | Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|------------------------------------------------------------------------------|
| Provide lands, easements, rights of way, and borrow and excavated or dredged material disposal areas, after reductions for such credit have been made in the required cash payments.                                                                                                                                                | 20,000                                          |                                                                              |
| Provide and maintain, at its own expense, the local service facilities. All berthing areas will be maintained at the project depth of 45 ft at all commercial terminals, piers, and docks.                                                                                                                                          | 7,326,000                                       |                                                                              |
| Pay 25 percent of the costs allocated to general navigation facilities during construction.                                                                                                                                                                                                                                         | 32,815,000                                      |                                                                              |
| Reimburse an additional 10 percent of the costs of general navigation features allocated to commercial navigation within a period of 30 years following completion of construction, as partially reduced by a credit allowed for the value of lands, easements, rights of way, and relocations, provided for commercial navigation. | 13,106,000                                      |                                                                              |
| Total Non-Federal Costs                                                                                                                                                                                                                                                                                                             | \$53,267,000                                    |                                                                              |

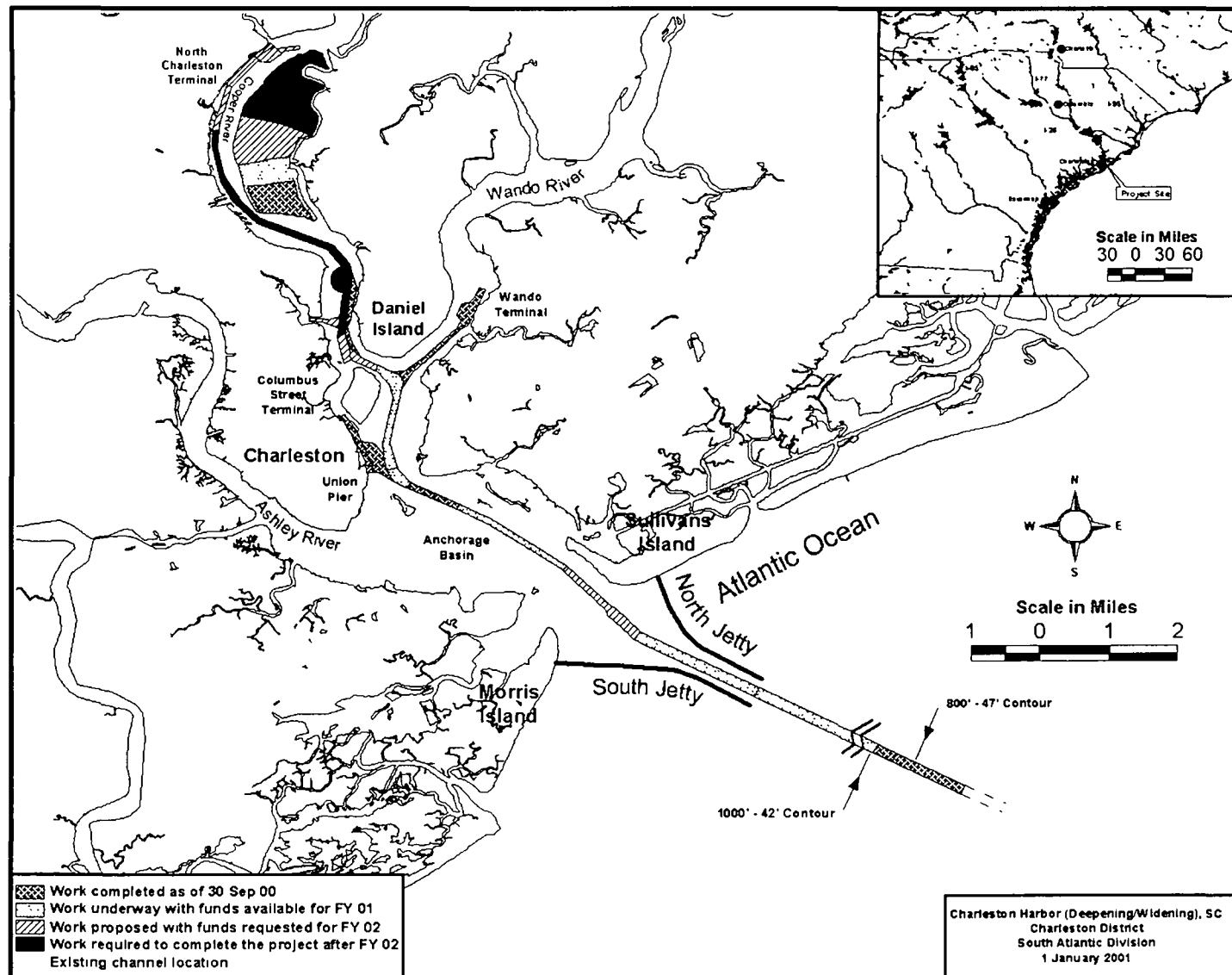
The non-Federal sponsors have also agreed to make all required payments concurrently with project construction and reimburse its share of construction costs within a period of 30 yrs following completion of construction.

STATUS OF LOCAL COOPERATION: The South Carolina State Ports Authority (SPA) is the non-Federal partner. The Project Cooperation Agreement was executed on 5 June 1998. Their financial plan has been reviewed and found to be in compliance with requirements for ensuring that the non-Federal partner has a reasonable and implementable plan for meeting its financial commitment. Their plan is to fund their share of project costs from the South Carolina Legislature. In the event such funds are not available from the South Carolina Legislature, the SPA is prepared to fund their portion of the project construction cost by an accumulation of cash before and during construction plus the sale, if required, of Revenue Bonds. SPA is a state agency that generates revenues through assessment of port fees to shipping firms that use their facilities. The SPA has a positive cash flow and exercises sound management practices.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$98,539,000 remains the same amount that was last presented to Congress (FY 2001).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The proposed action does not constitute a major Federal action significantly affecting the quality of the human environment, therefore, the preparation of an EIS is not required. The Assessment (EA) and Findings of No Significant Impact (FONSI) were signed by the District Engineer on 8 March 1996.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1997 and funds to initiate construction were appropriated in FY 1998.



APPROPRIATION TITLE: Construction, General - Beach Erosion Control

PROJECT: Brevard County Shore Protection Project (Continuing)

LOCATION: Brevard County is located on the east coast of Florida at the approximate midpoint of the peninsula. The project area is comprised of the 24 miles of Brevard County Atlantic ocean shoreline.

DESCRIPTION: The plan of improvement for the Brevard County beaches consist of restoration of 9.4 miles of shoreline for the north reach and 3.4 miles for the south reach. The north reach would extend from the south jetty at Canaveral Harbor to the northern limit of Patrick Air Force Base (PAFB), and the south reach would extend from FDEP monument R-119 to the Spessard Holland Park. This section was originally 10.5 miles long, but 7.1 miles were excluded because of nearshore hardgrounds. Also, 4.5 miles of PAFB shoreline has been excluded upon their request.

The design berm elevation is +10.0 feet (ft) mean low water (MLW) extending from the shoreward intersection of the existing profile seaward to the location of the pre-project mean high water (MHW) shoreline. At the location of the MHW shoreline, the design template slopes 1 vertical (V) to 15 horizontal (H) seaward to the location of MLW thence 1 V to 50 H out to the intersection with the existing profile.

AUTHORIZATION: Water Resources Development Act of 1996.

REMAINING BENEFIT-REMAINING COST RATIO: 1.9 to 1.0 at 6 7/8 percent

TOTAL BENEFIT-COST RATIO: 1.9 to 1.0 at 6 7/8 percent

BASIS OF BENEFIT-COST RATIO: Benefits are from the economic analysis performed for the September 1996 Final Feasibility Report and Environmental Impact Statement, updated at October 1997 price levels.

| SUMMARIZED FINANCIAL DATA                      |             |             | ACCUM<br>PCT OF<br>EST<br>FED COST | STATUS<br>(1 Jan 2001) | PCT<br>CMPL | PHYSICAL<br>COMPLETION<br>SCHEDULE |
|------------------------------------------------|-------------|-------------|------------------------------------|------------------------|-------------|------------------------------------|
| Estimated Federal Cost                         |             | 92,000,000  |                                    | Beach Replenishment    |             |                                    |
| Initial Construction                           | 24,802,000  |             |                                    | Initial Fill           | 0           | May 2002                           |
| Periodic Nourishment                           | 67,198,000  |             |                                    | Periodic Nourishment   | 0           | Being determined                   |
| Estimated Non-Federal Cost                     |             | 139,000,000 |                                    | Entire Project         | 0           | Being determined                   |
| Initial Construction                           | 14,334,000  |             |                                    |                        |             |                                    |
| Cash Contribution                              | 13,947,000  |             |                                    |                        |             |                                    |
| Other Costs                                    | 387,000     |             |                                    |                        |             |                                    |
| Periodic Nourishment                           | 124,666,000 |             |                                    |                        |             |                                    |
| Cash Contributions                             | 124,666,000 |             |                                    |                        |             |                                    |
| Other Costs                                    | 0           |             |                                    |                        |             |                                    |
| Total Estimated Project Cost                   |             | 231,000,000 |                                    |                        |             |                                    |
| Initial Construction                           | 39,136,000  |             |                                    |                        |             |                                    |
| Periodic Nourishment                           | 191,864,000 |             |                                    |                        |             |                                    |
| Allocations to 30 September 2000               |             | 1,868,000   |                                    |                        |             |                                    |
| Conference Allowance for FY 2001               |             | 6,000,000   |                                    |                        |             |                                    |
| Allocation for FY 2001                         |             | 15,770,000  | 1/                                 |                        |             |                                    |
| Allocations through FY 2001                    |             | 17,638,000  |                                    | 19%                    |             |                                    |
| Allocation Requested for 2002                  |             | 200,000     | 2/                                 | 19%                    |             |                                    |
| Programmed Balance to Complete after FY 2002   |             | 74,162,000  | 2/                                 |                        |             |                                    |
| Unprogrammed Balance to Complete after FY 2002 |             | 0           |                                    |                        |             |                                    |

1/ Reflects \$960,000 reduction assigned as savings and slippage,\$10,742,000 reprogrammed to the project, and \$12,000 rescinded in accordance with the Consolidated Appropriations Act, 2001.

2/ Reflects 65% non-Federal cost share.



# PHYSICAL DATA

|                             |                                     |
|-----------------------------|-------------------------------------|
| Initial Beach Fill          | 4,145,000 cubic yards               |
| Future Periodic Nourishment | 1,117,000 cubic yards every 6 years |

JUSTIFICATION: The primary purpose of the Brevard County Shore Protection Project would be reduction of storm damage to upland development. The project for the north reach would provide protection to over \$457,000,000 in private and commercial upland development, as well as infrastructure such as roads and utilities. About \$2.7 million (less than 1.0% of inventory) of annual damages are predicted to occur in the north reach under future without project conditions. The value includes the cost of damage to upland development, coastal armor, backfill, and the value of land lost. Incidental recreation benefits of \$984,000 are also claimed for the selected plan. The average annual equivalent benefit of the selected plan for the north reach will be \$3,132,000. The project for the south reach would provide protection to approximately \$77,000,000 in private and commercial upland development, as well as infrastructure such as roads and utilities. About \$15 million (approximately 8.3% of inventory) worth of annual damages are predicted to occur in the south reach under future without project conditions. The value includes the cost of damage to upland development, coastal armor, backfill, and the value of land lost for the entire 3.4-mile south reach of the project. Storm damage benefits of \$3,179,000 and incidental recreation benefits of \$122,000 are claimed for the 3.4-mile modified south reach. The average annual equivalent benefit for the modified south reach is \$3,301,000.

| Annual Benefits         | Amount           |
|-------------------------|------------------|
| Storm Damage Prevention | 5,327,000        |
| Recreation Benefits     | <u>1,106,000</u> |
| Total                   | 6,433,000        |

FISCAL YEAR 2002: The requested amount will be applied as follows:

|                                         |                |
|-----------------------------------------|----------------|
| Construction management for South Reach | <u>200,000</u> |
| Total                                   | 200,000        |

NON-FEDERAL COST: In accordance with the cost-sharing and financing concepts reflected in the authorizing legislation, the non-Federal sponsor must comply with the requirements listed below.

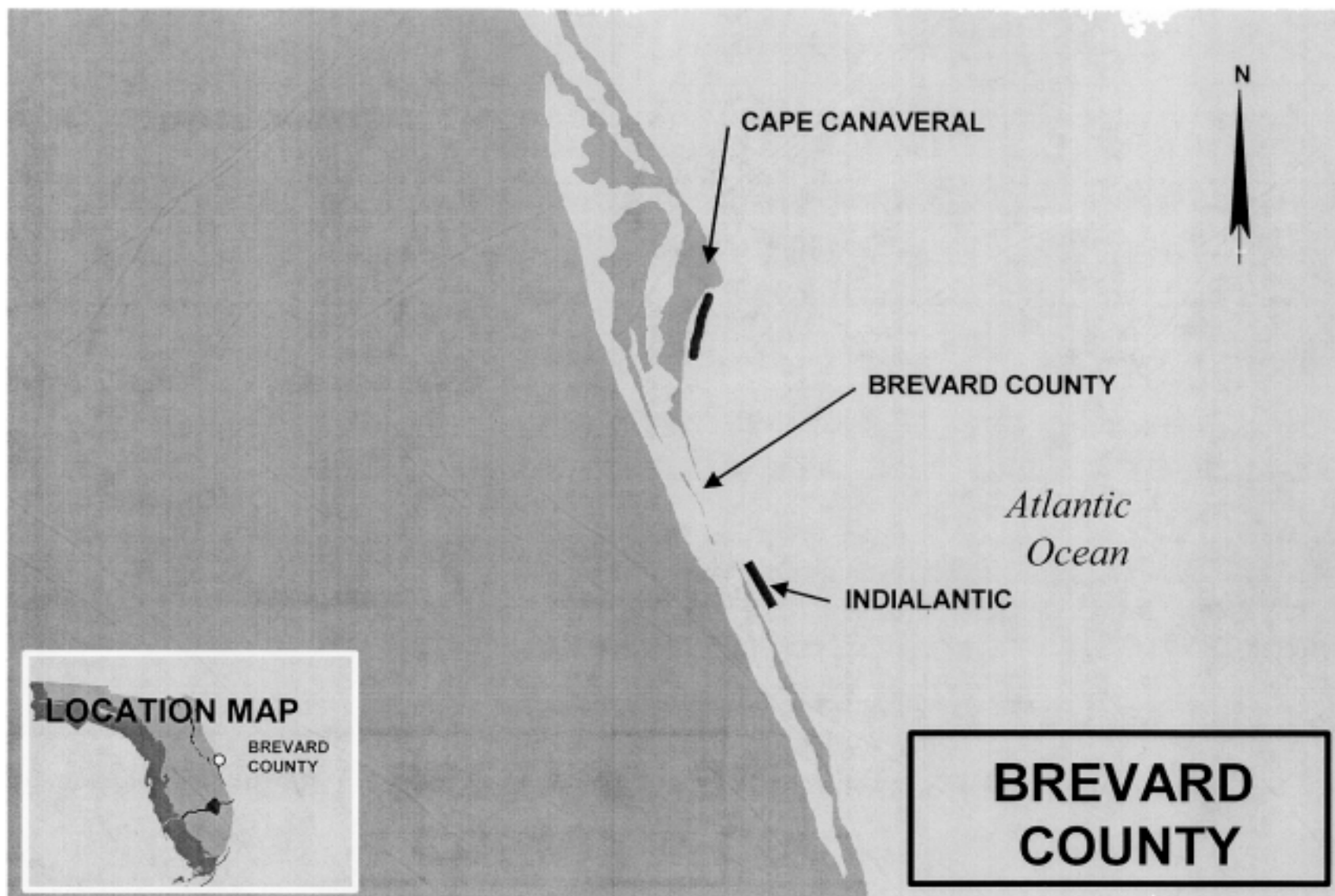
| Requirements of Local Cooperation                                                                                                                                                                                          | Payments During Construction and Reimbursements | Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|------------------------------------------------------------------------------|
| Provide lands, easements, right-of-ways, and relocations                                                                                                                                                                   | 387,000                                         |                                                                              |
| Pay 35 percent of costs allocated to initial fill North Reach                                                                                                                                                              | 7,409,000                                       |                                                                              |
| Pay 35 percent of costs allocated to initial fill South Reach                                                                                                                                                              | 6,538,000                                       |                                                                              |
| Pay 65% of the separable costs for FY 02 and beyond, allocated to recreation, including periodic nourishment, and bear al costs of operation, maintenance, repair, rehabilitation, and replacement of breakwater features. | 124,666,000                                     |                                                                              |
| Total                                                                                                                                                                                                                      | 139,000,000                                     |                                                                              |

STATUS OF LOCAL COOPERATION: The Brevard County Board of County Commissioners is the local sponsor. The Project Cooperation Agreement (PCA) for the project is scheduled for execution in December 1999. A PCA amendment will be executed to revise the local cooperation requirements in accordance with changed cost sharing requirements for periodic nourishment (35% Federal, 65% non-Federal) before the FY 02 periodic nourishment is performed. The current non-Federal cost estimate of \$139,000,000, is an increase of \$44,600,000 from the non-Federal cost estimate of \$94,400,000 based on changes in projected rates of inflation, reanalysis of requirements to reflect current and projected levels of expenditures and the cost share increase from 50% to 65%.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps of Engineers) cost estimate is \$179,900,000 which is the initial cost to Congress.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Final EIS was filed with the feasibility report on September 1996. Approximately 32 acres of nearshore rock outcrops composed of lithified coquina limestone and scattered patches of sabellariid worm rock exist along the northern two thirds of the south reach. The project plan for the south reach has been modified to avoid impacts to the hardgrounds.

OTHER INFORMATION: Coordination for execution of the Preconstruction Engineering and Design (PED) agreement is ongoing. The PED stage will entail any remaining design work required and the preparation of plans and specifications for award of the construction contract for the project. The PED phase is scheduled to be completed by September 1998.



Division: South Atlantic

District: Jacksonville

Brevard County, FL

3 April 2001

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APPROPRIATION TITLE: Construction, General - Beach Erosion Control

PROJECT: Broward County Shore Protection Project - Continuing

LOCATION: Broward County is located on the lower Atlantic Coast of Florida, 30 miles north of Miami.

DESCRIPTION: The plan of improvement for the Broward County beaches consists of initial beach fill and periodic nourishment along three segments. Segment I, along 4 miles of shorefront from the Broward/Palm Beach County line to Hillsboro Inlet, has not been constructed. Segment II, consisting of 11.5 miles of shorefront between Hillsboro Inlet and Port Everglades, was initially constructed at Pompano Beach in 1970 and Lauderdale by the Sea in 1984. Segment III consists of about 8 miles of shorefront south of Port Everglades to the south county line. Along Segment III, 1.6 miles at J. U. Lloyd State Park were initially constructed in 1978, and renourished in 1990, and 5.2 miles were initially constructed in 1980 and renourished in 1991. All construction to date was completed by the sponsor, Broward County.

AUTHORIZATION: River and Harbor Act of 1965, Section 934 of WRDA 1986, and Section 506 (a) of WRDA 1996. The initial authorization allows for construction by the non-Federal project sponsor with subsequent reimbursement of Federal costs.

REMAINING BENEFIT-REMAINING COST RATIO: 9.2 to 1.0 at 7-5/8 percent

TOTAL BENEFIT-COST RATIO: 3/7 to 1.0 at 7-5/8 percent

BASIS OF BENEFIT-COST RATIO: Feasibility Report (October 1996) – Coast of Florida Erosion and Storm Effects Study.

INITIAL BENEFIT-COST RATIO: 3.0 at 2-7/8 percent (COE Report 1963)

| SUMMARIZED FINANCIAL DATA                          |             |             | ACCUM<br>PCT OF<br>EST<br>FED COST | STATUS<br>(1 Jan 2001) | PCT<br>CMPL | PHYSICAL<br>COMPLETION<br>SCHEDULE |
|----------------------------------------------------|-------------|-------------|------------------------------------|------------------------|-------------|------------------------------------|
| Estimated Federal Cost                             |             | 67,400,000  |                                    | Beach Replenishment    |             |                                    |
| Initial Construction                               | 9,876,000   |             |                                    | Initial Fill           | 0           |                                    |
| Periodic Nourishment                               | 57,524,000  |             |                                    | Segment I              | 0           | Being Determined                   |
| Estimated Non-Federal Cost                         |             | 101,600,000 |                                    | Segment II             |             |                                    |
| Initial Construction                               | 8,233,000   |             |                                    | Pompano Beach          | 100         | 1970                               |
| Cash Contribution                                  | 8,233,000   |             |                                    | Lauderdale By The Sea  | 100         | 1984                               |
| Other Costs                                        | 0           |             |                                    | Segment III            |             |                                    |
| Periodic Nourishment                               | 93,367,000  |             |                                    | J. U. Lloyd            | 100         | 1978                               |
| Cash Contributions                                 | 93,367,000  |             |                                    | Hollywood-Hallandale   | 100         | 1980                               |
| Other Costs                                        | 0           |             |                                    | Periodic Nourishment   |             |                                    |
| Total Estimated Project Cost                       |             | 169,000,000 |                                    | Segment I              | 0           | Being Determined                   |
| Initial Construction                               | 18,109,000  |             |                                    | Segment II             | 60          | Being Determined                   |
| Periodic Nourishment                               | 150,891,000 |             |                                    | Segment III            | 40          | Being Determined                   |
| Allocations to 30 September 2000                   |             | 19,917,000  |                                    | Entire Project         | 35          | Being Determined                   |
| Conference Allowance for FY 2001                   |             | 0           |                                    |                        |             |                                    |
| Allocation for FY 2001                             |             | 500,000     | 1/                                 |                        |             |                                    |
| Allocations through FY 2001                        |             | 20,417,000  | 23%                                |                        |             |                                    |
| Allocation Requested for 2002                      |             | 200,000     | 2/ 23%                             |                        |             |                                    |
| Programmed Balance to Complete after FY 2002       |             | 41,834,000  | 2/                                 |                        |             |                                    |
| Unprogrammed Balance to Complete after FY 2002     |             | 4,949,000   |                                    |                        |             |                                    |
| 1/ Reflects \$500,000 reprogrammed to the project. |             |             |                                    |                        |             |                                    |
| 2/ Reflects 65% non-Federal cost share.            |             |             |                                    |                        |             |                                    |

#### PHYSICAL DATA

Initial Beach Fill  
Future Periodic Nourishment

Division: South Atlantic

District: Jacksonville

. Broward County, FL

3 April 2001

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JUSTIFICATION: The project for initial beach fill and periodic nourishment is needed to provide protection to upland development. Prior to initial construction, shorefront structures were susceptible to being undermined and recession of the shoreline was causing the loss of valuable property. The project area is affected by tropical storms of hurricane intensity, with a return interval of once every 2.9 years, and northeasters. The constructed segments of the project provide storm reduction benefits and provide mitigation for loss of land. Recreation benefits also are provided by the added width of the beach that is provided by the project.

| Annual Benefits (Seg I)* | Amount        |
|--------------------------|---------------|
| Storm Damage Reduction   | 8,157,100     |
| Recreation Benefits      | <u>62,000</u> |
| Subtotal                 | 8,219,100     |

| Annual Benefits (Seg II)** | Amount         |
|----------------------------|----------------|
| Storm Damage Reduction     | 9,784,000      |
| Recreation Benefits        | <u>632,000</u> |
| Subtotal                   | 10,416,000     |

| Annual Benefits (Seg III)*** | Amount           |
|------------------------------|------------------|
| Storm Damage Reduction       | 2,447,000        |
| Recreation Benefits          | <u>1,082,000</u> |
| Subtotal                     | 3,529,000        |
| Total                        | 22,164,100       |

\* Source: Coast of Florida Erosion and Storm Effects Feasibility Report (October 1996)

\*\* Source: Approved Section 934 Report (April 1994)

\*\*\* Source: Approved Section 934 Report (April 1991)

FISCAL YEAR 2002: The requested amount will be applied as follows:

|                                                               |                |
|---------------------------------------------------------------|----------------|
| Planning, engineering, and design for Segments I, II, and III | <u>200,000</u> |
| Total                                                         | 200,000        |

NON-FEDERAL COST: In accordance with the cost-sharing and financing concepts reflected in the authorizing legislation, the non-Federal sponsor must comply with the requirements listed below.

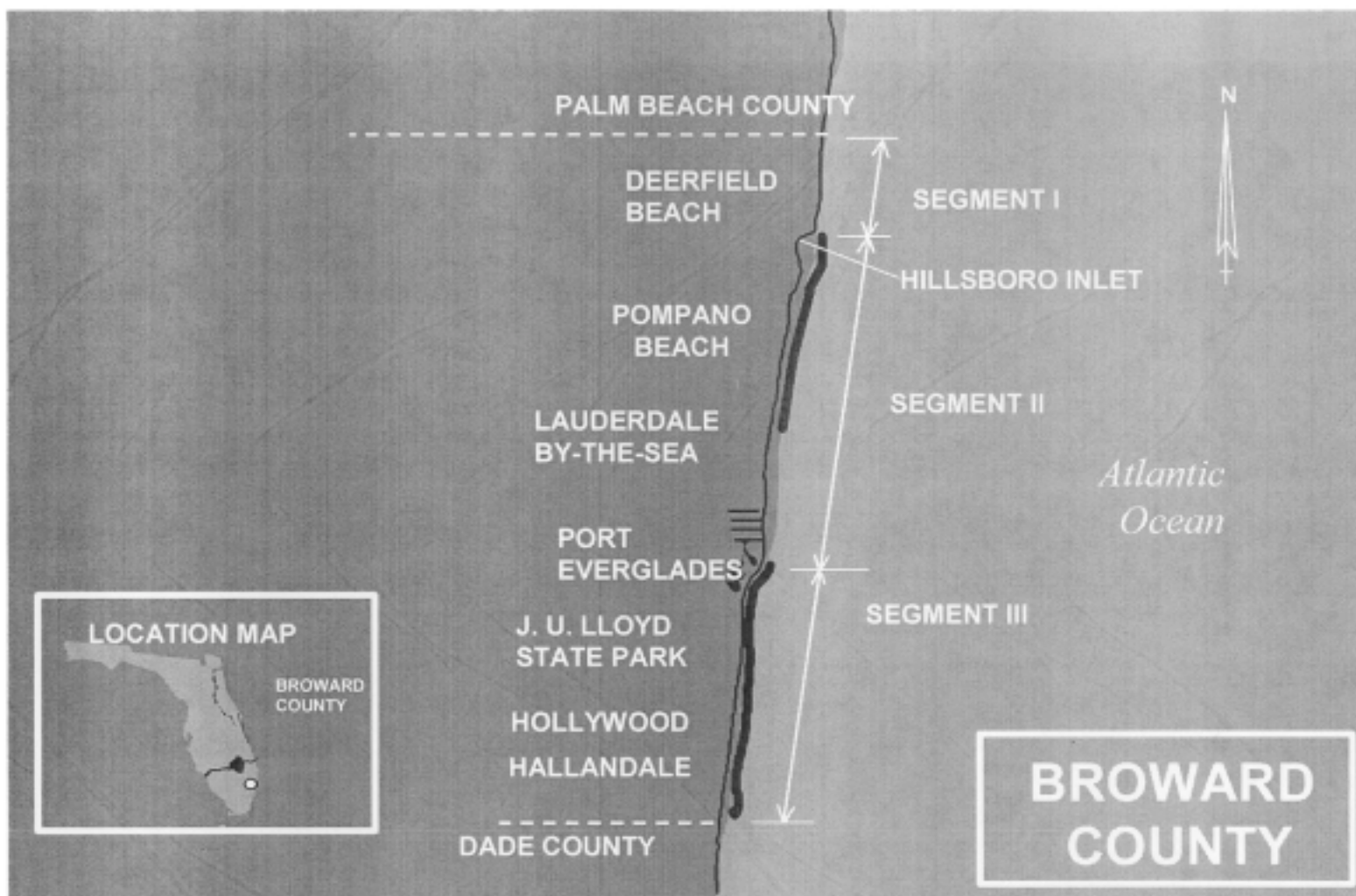
| Requirements of Local Cooperation                                                                                                                                                                                           | Payments During Construction and Reimbursements | Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|------------------------------------------------------------------------------|
| Provide lands, easements, right-of-ways, and relocations                                                                                                                                                                    |                                                 | County's estimate:                                                           |
| Pay 30.00 percent of costs allocated J. U. Lloyd State Park (Seg III)                                                                                                                                                       | 8,233,000                                       | \$100,000/year for this project                                              |
| Pay 56.20 percent of costs allocated to Hollywood-Hallandale (Seg III)                                                                                                                                                      |                                                 | (Segments II and III only.)                                                  |
| Pay 65% of the separable costs for FY 02 and beyond, allocated to recreation, including periodic nourishment, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of breakwater features. | <u>93,367,000</u>                               |                                                                              |
| Total                                                                                                                                                                                                                       | 101,600,000                                     |                                                                              |

STATUS OF LOCAL COOPERATION: Broward County is the sponsor for Segments II and III and has constructed all of the initial beach fill and periodic renourishments to date. The City of Deerfield Beach has recently indicated a desire to act as the project sponsor for initial construction of Segment I. A PCA amendment will be executed to revise the local cooperation requirements in accordance with changed cost sharing requirements for periodic nourishment (35% Federal , 65% non-Federal) before the FY 02 periodic nourishment is performed. The current non-Federal cost estimate of \$101,600,000, is an increase of \$22,800,000 from the non-Federal cost estimate of \$78,800,000 based on changes in projected rates of inflation, reanalysis of requirements to reflect current and projected levels of expenditures and the cost share increase from 50% to 65%.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps) cost estimate is \$67,400,000 which is the initial estimate submitted to Congress.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: Broward County, the project sponsor, is currently preparing an EIS to accompany the GRR for future renourishment of Segments II and III. The draft EIS is anticipated to be ready for public review in July 2001. The EIS for the Coast of Florida feasibility report (including the Broward County shoreline) was filed in the Federal Register on 15 November 1996. Environmental Assessments were completed for renourishment of Pompano Beach in 1983, J. U. Lloyd State Park in 1989, and Hollywood-Hallandale in 1991.

OTHER INFORMATION: A Congressional Add in FY 98 provided \$100,000 and a Congressional Add in FY 99 provided \$1,500,000 for E&D for the upcoming renourishment of Segments II and III. The sponsor, Broward County, is preparing a General Reevaluation Report (GRR) and P&S for this renourishment. The GRR is needed to support the execution of a Project Cooperation Agreement to extend Federal cost sharing based upon WRDA 1996, Sec 506(a). Federal participation in cost sharing was limited to 1990 under the prior cost sharing agreement.





APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: Dade County, Florida (Continuing)

LOCATION: Dade County is on the southeast coast of Florida. The project area consists of 9.3 miles of the Atlantic shoreline of the county from Government Cut north to Bakers Haulover Inlet, 1.2 miles at Haulover Beach Park, and the section of beach along 2.5 miles north of Haulover Beach Park at Sunny Isles.

DESCRIPTION: The project provides for a protective and recreational beach with a dune for beach erosion control and hurricane protection along 9.3 miles and a protective and recreational beach along 3.7 miles. The berm width is 50 feet at elevation +9.0 feet MLW for 10.5 miles and 20 feet wide at +9.0 feet MLW for 2.5 miles.

AUTHORIZATION: Flood Control Act of 1968, Water Resources Development Act of 1974, Supplemental Appropriations Act of 1985, and Water Resources Development Act of 1986.

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable because initial construction has been completed.

TOTAL BENEFIT-COST RATIO: 2.6 to 1 at 3-1/4 percent.

INITIAL BENEFIT-COST RATIO: 5.1 to 1 at 3-1/4 percent (FY 1965).

BASIS OF BENEFIT-COST RATIO: Initial benefits are from the June 1965 Dade County Report at October 1964 price levels. Total benefits are from the April 1985 Dade County, North of Haulover Beach Park, Design Memorandum at October 1984 price levels.

| SUMMARIZED FINANCIAL DATA                      |             |  | ACCUM<br>PCT OF<br>EST FED<br>COST | STATUS<br>(1 Jan 2001)                        | PCT<br>CMPL | PHYSICAL<br>COMPLETION<br>SCHEDULE |
|------------------------------------------------|-------------|--|------------------------------------|-----------------------------------------------|-------------|------------------------------------|
| Estimated Federal Cost                         |             |  | 143,200,000                        | Breakwaters and Seawalls                      |             |                                    |
| Initial Construction                           |             |  | 47,309,000                         | Jetty Extension                               | 100         | Aug 1976                           |
| Periodic nourishment                           |             |  | 95,891,000                         | Upgrading N. Jetty at<br>Government Cut       | 100         | Nov 1983                           |
| Estimated Non-Federal Cost                     |             |  | 204,700,000                        | Jetty Rehabilitation at<br>Haulover Inlet     | 100         | Nov 1986                           |
| Initial Construction                           |             |  | 40,647,000                         | Beach Replenishment<br>Initial Fill           | 100         | Aug 1989                           |
| Cash Contributions                             | 38,808,000  |  |                                    | Periodic Nourishment<br>Sunny Isles (Portion) | 0           | Being Determined                   |
| Other Costs                                    | 1,839,000   |  |                                    | Dade County(Remainder)                        | 10          | Being Determined                   |
| Periodic Nourishment                           |             |  | 164,053,000                        |                                               |             |                                    |
| Cash Contributions                             | 164,053,000 |  |                                    |                                               |             |                                    |
| Other Costs                                    | 0           |  |                                    |                                               |             |                                    |
| Total Estimated Project Cost                   |             |  | 347,900,000                        | Entire Project                                | 40          | Being Determined                   |
| Initial Construction                           |             |  | 87,956,000                         |                                               |             |                                    |
| Periodic Nourishment                           |             |  | 259,944,000                        |                                               |             |                                    |
| Allocations to 30 September 2000               |             |  | 64,408,000                         |                                               |             |                                    |
| Conference Allowance for FY 2001               |             |  | 8,000,000                          |                                               |             |                                    |
| Allocation for FY 2001                         |             |  | 6,204,000                          | 1/                                            |             |                                    |
| Allocations through FY 2001                    |             |  | 70,612,000                         | 39%                                           |             |                                    |
| Allocation Requested for 2002                  |             |  | 8,000,000                          | 2/ 55%                                        |             |                                    |
| Programmed Balance to Complete after FY 2002   |             |  | 64,588,000                         | 2/                                            |             |                                    |
| Unprogrammed Balance to Complete after FY 2002 |             |  | 0                                  |                                               |             |                                    |

1/ Reflects \$1,280,000 reduction assigned as savings and slippage; \$500,000 reprogrammed from the project; \$16,000 rescinded in accordance with the Consolidated Appropriations Act, 2001.

2/ Reflects 65% non-Federal cost share.

# PHYSICAL DATA

|                      |            |             |
|----------------------|------------|-------------|
| Jetty Extension      |            |             |
| Initial Beach Fill   | 15,597,000 | Cy          |
| Advance Nourishment  | 450,000    | Cy          |
| Periodic Nourishment | 3,540,000  | Cy/10 years |

JUSTIFICATION: The Dade County shore, occupied by Miami Beach and a number of smaller communities, is highly developed and probably represents the most densely concentrated resort area in the world. The area is heavily visited by tourists throughout the year. The estimated current attendance for the project shore exceeds 15 million annually. Prior to the initial beach fill, recession of the shore caused loss of valuable beaches and property and placed seawalls and other structures under direct wave attack. At a number of locations, erosion undermined or threatened to undermine shorefront structures. Dade County lies in a zone of relatively high hurricane frequency, and many of the most intense hurricanes of record have passed over or near the area. Storm surge and waves generated in the ocean and in Biscayne Bay by past hurricanes have caused major tidal flooding in the project area. A severe hurricane crossing the area on a critical path could cause a major flood disaster. The September 1926 hurricane devastated Miami and took 100 lives. Hurricane Andrew impacted the shorefront in Dade County in August 1992. The project prevented an estimated \$20 million in damages to shorefront development, with a loss of only 2 percent of the beach fill. The beach fill loss due to Hurricane Andrew was restored under the authority of PL 84-99 during the overall renourishment of the project during FY97 and FY99. The beaches of Dade County are of prime importance as tourist attractions. It is essential to the economy of the area that the beaches be maintained and preserved. Average annual benefits are as follows:

| Annual Benefits         | Amount         |
|-------------------------|----------------|
| Beach Erosion Control   | 3,795,000      |
| Recreation              | 22,181,000     |
| Storm Damage Prevention | 1,879,000      |
| Land Enhancement        | <u>125,000</u> |
| Total                   | 27,980,000     |

FISCAL YEAR 2002: The requested amount will be applied as follows:

|                                                            |                |
|------------------------------------------------------------|----------------|
| Renourishment Contract for N. Miami Beach (Test Beach)     | 899,000        |
| Renourishment Contract/Observer for Sunny Isle Mod (Crt 4) | 6,298,000      |
| Renourishment Contract for Haulover Beach Park (Crt 3)     | 500,000        |
| Construction Management                                    | 179,000        |
| E&D and Monitoring                                         | <u>124,000</u> |
| Total                                                      | 8,000,000      |

NON-FEDERAL COST: In accordance with the cost-sharing and financing concepts reflected in the authorizing legislation, the non-Federal sponsor must comply with the requirements listed below.

| Requirements of Local Cooperation                                                                                                                                                                                           | Payments During Construction and Reimbursements | Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|------------------------------------------------------------------------------|
| Provide lands, easements, and rights-of-way                                                                                                                                                                                 | 1,839,000                                       |                                                                              |
| Pay 65% of the separable costs for FY 02 and beyond, allocated to recreation, including periodic nourishment, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of breakwater features. | <u>202,861,000</u>                              |                                                                              |
| Total Non-Federal Cost                                                                                                                                                                                                      | 204,700,000                                     | 0                                                                            |

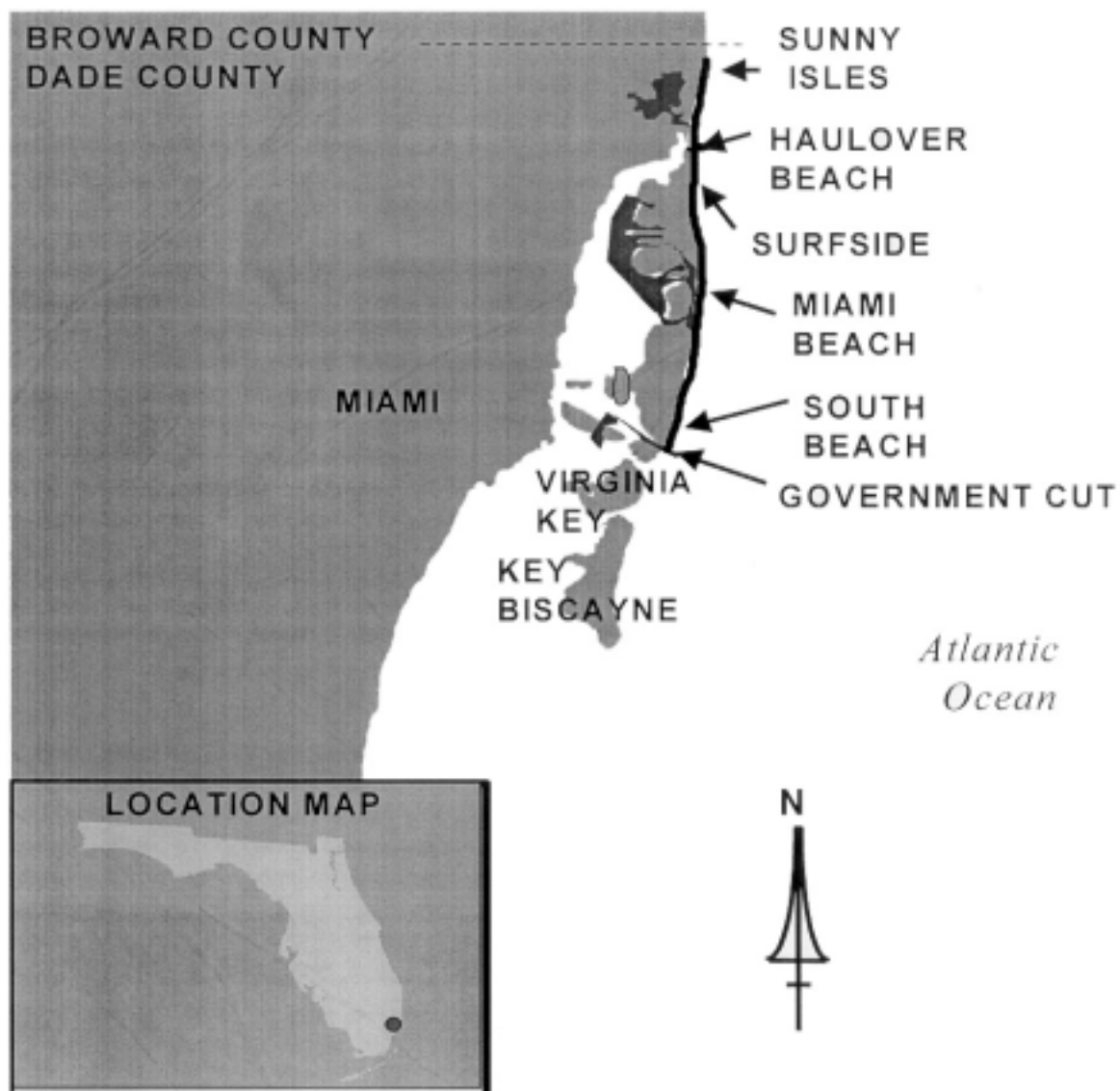
STATUS OF LOCAL COOPERATION: The Dade County Board of County Commissioners, Miami, Florida, is the local sponsor. A Local Cooperation Agreement pursuant to Section 221 of the River and Harbor and Flood Control Act of 1970 (PL 91-611) was accepted by the Secretary of the Army on 16 January 1973. A supplemental agreement for reimbursement to the local sponsor for the Bal Harbour portion was approved on 30 June 1976. An agreement for the section north of Haulover Beach Park was signed on 20 June 1986. An LCA amendment will be executed to revise the local cooperation requirements in accordance with changed cost sharing requirements for periodic nourishment (35% Federal, 65% non-Federal) before the FY 02 periodic nourishment is performed. The current non-Federal cost estimate of \$204,700,000 is an increase of \$39,200,000 from the non-Federal cost estimate of \$165,500,000 based on changes in projected rates of inflation, reanalysis of requirements to reflect current and projected levels of expenditures and the cost share increase from 50% to 65%.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps) cost estimate of \$143,200,000 is an decrease of \$39,200,000 from the latest estimate (\$182,400,000) presented to Congress (FY 1999). This change includes the following item.

| Item                 | Amount             |
|----------------------|--------------------|
| Change in cost share | <u>-39,200,000</u> |
| Total                | -39,200,000        |

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final EIS was filed with CEQ on 27 August 1976. The provisions of Section 404 of the Clean Water Act were met by a Section 404(b)(1) Evaluation in June 1984. A supplement to the EIS was filed with EPA on 18 March 1983. An EIS was completed for the modification of the project at Sunny Isles.

OTHER INFORMATION: Funds to initiate preconstruction planning were appropriated in FY 1973 and initial construction funds were appropriated in FY 1977. Funds to initiate construction of the Sunny Isles (North of Haulover Beach Park) segment were appropriated in FY 1985. Section 69 of the Water Resources Development Act of 1974 authorized initial construction by non-Federal interests of the 0.85-mile segment immediately south of Bakers Haulover Inlet (Bal Harbour). Local interests have accomplished the work and reimbursement was provided by funds included in the 1976 Appropriations Act. Section 501(a) of the Water Resources Development Act of 1986 authorized the extension of Federal participation in beach nourishment from 10 years to the life of the project; however, a period of 50 years was used for economic analysis of the project. Available beach fill material located in offshore borrow areas will almost be exhausted through renourishment contracts in 2001 and 2002. Engineering and design is underway to allow use of alternative sources of beach fill for subsequent renourishments.



**DADE COUNTY,  
FLORIDA**

APPROPRIATION TITLE: Construction, General - Beach Erosion Control (Shore Protection)

PROJECT: Palm Beach County, Florida (Continuing)

LOCATION: The Delray Beach segment of the project is located in the southern part of Palm Beach County, Florida, on the lower east coast of the state, about 50 miles north of Miami.

DESCRIPTION: The Delray Beach segment is a reimbursable project that was initially constructed in 1973 by the City of Delray Beach and renourished in 1978 and 1984. The project consists of maintaining the existing beach profile with a berm elevation of 9 feet above NGVD, providing 9 years of advanced nourishment. The project is for initial beach fill and periodic nourishment along 2.7 miles of beach. Beach fill material will be obtained approximately 2000 feet offshore. The project will provide storm damage reduction benefits along the adjacent property and road from storm damage to upland development.

AUTHORIZATION: Section 101, River and Harbor Act of 1962; Section 934 of WRDA; Section 506(b) of the Water Resources Development Act of 1996

REMAINING BENEFIT-REMAINING COST RATIO: Delray Beach has no remaining benefits since initial construction was completed in 1973.

TOTAL BENEFIT-COST RATIO: 2.4 to 1 at 8-3/4 percent (Delray Beach)

INITIAL BENEFIT-COST RATIO: 1.5 to 1 at 2-3/4 percent (Delray Beach)

BASIS OF BENEFIT-COST RATIO: Benefits are from the Palm Beach County, Florida, General Design Memorandum, Addendum for Third Periodic Nourishment at Delray Beach (May 1992 with 1990 price levels).

| SUMMARIZED FINANCIAL DATA                       |             |             |             | ACCUM<br>PCT OF<br>EST<br>FED COST | STATUS<br>(1 Jan 2001)       | PCT<br>CMPL | PHYSICAL<br>COMPLETION<br>SCHEDULE |
|-------------------------------------------------|-------------|-------------|-------------|------------------------------------|------------------------------|-------------|------------------------------------|
| Estimated Federal Cost                          |             |             |             | 59,000,000                         | Groins:                      |             |                                    |
| Programmed Construction                         |             |             | 57,236,000  |                                    | Ocean Ridge                  | 100         | Mar 1996                           |
| Initial Construction                            | 10,125,000  |             |             |                                    | Initial Fill:                |             |                                    |
| Periodic Nourishment                            | 47,111,000  |             |             |                                    | Delray Beach                 | 100         | May 1973                           |
| Unprogrammed Construction                       |             |             | 1,764,000   |                                    | Jupiter/Carlin               | 100         | Sep 1995                           |
| Initial Construction                            | 1,673,000   |             |             |                                    | Ocean Ridge                  | 100         | Sep 1998                           |
| Periodic Nourishment                            | 91,000      |             |             |                                    | Boca Raton                   | 100         | Sep 1988                           |
| Estimated Non-Federal Cost                      |             |             |             | 207,600,000                        | Renourishment:               |             |                                    |
| Programmed Construction                         |             |             | 204,100,000 |                                    | Delray Beach 1 <sup>st</sup> | 100         | Mar 1978                           |
| Initial Construction                            | 7,387,000   |             |             |                                    | Delray Beach 2 <sup>nd</sup> | 100         | Sep 1984                           |
| Cash Contribution                               | 7,387,000   |             |             |                                    | Delray Beach 3 <sup>rd</sup> | 100         | Dec 1992                           |
| Other Costs                                     | 0           |             |             |                                    | Delray Beach 4 <sup>th</sup> | 0           | Dec 2000                           |
| Periodic Nourishment                            |             | 196,713,000 |             |                                    | Boca Raton 1 <sup>st</sup>   | 100         | Dec 1997                           |
| Cash Contributions                              | 196,713,000 |             |             |                                    | Ocean Ridge 1 <sup>st</sup>  | 0           | Being determined                   |
| Other Costs                                     | 0           |             |             |                                    | Entire Project               | 8           | Being determined                   |
| Estimated Non-Federal Cost                      |             |             |             |                                    |                              |             |                                    |
| Unprogrammed Construction                       |             |             | 3,500,000   |                                    |                              |             |                                    |
| Initial Construction                            | 3,331,000   |             |             |                                    |                              |             |                                    |
| Cash Contributions                              | 3,331,000   |             |             |                                    |                              |             |                                    |
| Other Costs                                     | 0           |             |             |                                    |                              |             |                                    |
| Periodic Nourishment                            |             | 169,000     |             |                                    |                              |             |                                    |
| Cash Contributions                              | 169,000     |             |             |                                    |                              |             |                                    |
| Other Costs                                     | 0           |             |             |                                    |                              |             |                                    |
| Total Estimated Programmed<br>Construction Cost |             |             | 261,336,000 |                                    |                              |             |                                    |
| Initial Construction                            | 17,512,000  |             |             |                                    |                              |             |                                    |
| Periodic Nourishment                            | 243,842,000 |             |             |                                    |                              |             |                                    |

Division: South Atlantic

District: Jacksonville

Palm Beach County, FL

3 April 2001

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# SUMMARIZED FINANCIAL DATA (Continued)

|                                                |             |             |            |
|------------------------------------------------|-------------|-------------|------------|
| Total Estimated Unprogrammed Construction Cost |             | 5,264,000   |            |
| Initial Construction                           | 5,004,000   |             |            |
| Periodic Nourishment                           | 260,000     |             |            |
| Total Estimated Project Cost                   |             | 266,600,000 | Accum      |
| Initial Construction                           | 22,516,000  |             | Pct of Est |
| Periodic Nourishment                           | 244,084,000 |             | Fed Cost   |
| Allocations to 30 September 2000               |             | 12,840,000  |            |
| Conference Allowance for FY 2001               |             | 0           |            |
| Allocation for FY 2001                         |             | 2,868,000   | 1/         |
| Allocations through FY 2001                    |             | 15,708,000  | 18%        |
| Allocation Requested for 2002                  |             | 200,000     | 2/ 19%     |
| Programmed Balance to Complete after FY 2002   |             | 41,328,000  | 2/         |
| Unprogrammed Balance to Complete after FY 2002 |             | 1,764,000   |            |

1/ Reflects \$2,868,000 reprogrammed to the project.

2/ Reflects 65% non-Federal cost share.

## PHYSICAL DATA

### Placement of Initial Beach Fill:

|                |           |    |
|----------------|-----------|----|
| Delray Beach   | 1,634,500 | Cy |
| Jupiter/Carlin | 513,000   | Cy |
| Tequesta       | 85,000    | Cy |
| Ocean Ridge    | 784,300   | Cy |
| Boca Raton     | 1,102,000 | Cy |

### Future Periodic Nourishment:

|                |         |                  |
|----------------|---------|------------------|
| Delray Beach   | 650,000 | Cy every 9 years |
| Jupiter/Carlin | 513,000 | Cy every 7 years |
| Tequesta       | 186,000 | Cy every 8 years |
| Ocean Ridge    | 433,800 | Cy every 6 years |
| Boca Raton     | 600,000 | Cy every 8 years |

JUSTIFICATION: Palm Beach County is a highly developed region of southern Florida. Economic development depends heavily upon tourism, with other major industries including aerospace, plastics, and agriculture. A county-wide General Design Memorandum (GDM) with an Environmental Impact Statement (EIS) was approved in 1987. A GDM addendum with Environmental Assessment for Delray Beach, prepared by the sponsor, was approved May 1992. The project was initially constructed by the sponsor in 1978 and renourished 1984 and 1992. The project is authorized for construction by P.L. 87-874 dated 23 October 1962. The cost sharing requirements, as stated in the GDM addendum, call for Palm Beach County Commissioners to pay 43.70 percent of all costs associated with future nourishments of the project up to the 50-year limit of Federal participation, and 100 percent thereafter. The annual reduction of damages to development based on current shorefront development is estimated to be \$1,887,000. Average annual benefits for the recommended plan, as stated in the GDM addendum (May 1992), are as follows:

| Annual Benefits         | Amount           |
|-------------------------|------------------|
| Delray Beach:           |                  |
| Storm Damage Prevention | 1,887,000        |
| Recreation Benefits     | <u>496,000</u>   |
| Total                   | 2,383,000        |
| Jupiter/Carlin:         |                  |
| Storm Damage Prevention | 730,000          |
| Recreation Benefits     | <u>824,000</u>   |
| Total                   | 1,554,000        |
| Tequesta:               |                  |
| Storm Damage Prevention | 1,351,000        |
| Recreation Benefits     | <u>308,000</u>   |
| Total                   | 1,659,000        |
| Ocean Ridge:            |                  |
| Storm Damage Prevention | 1,731,000        |
| Recreation Benefits     | <u>393,000</u>   |
| Total                   | 2,124,000        |
| Boca Raton:             |                  |
| Storm Damage Reduction  | 1,629,000        |
| Recreation Benefits     | <u>1,037,000</u> |
| Total                   | 2,666,000        |

FISCAL YEAR 2002: The requested amount will be applied as follows:

|                                                                             |               |
|-----------------------------------------------------------------------------|---------------|
| *Partially reimburse sponsor for 4 <sup>th</sup> Renourishment Delray Beach | 165,000       |
| Construction Management                                                     | <u>35,000</u> |
| Total                                                                       | 200,000       |

NON-FEDERAL COST: In accordance with the cost-sharing and financing concepts reflected in the Palm Beach County, Florida, General Design Memorandum, Addendum for Delray Beach segment, the non-Federal sponsor must comply with the requirements listed below. The initial LCA for the Delray Beach segment was executed on January 23, 1973. The PCA which allows Federal cost sharing until 2023 was executed in September 1992.

| Requirements of Local Cooperation<br>(Delray Beach Segment)                                                                                                                                                                                                                                    | Payments During<br>Construction and<br>Reimbursements | Annual Operation,<br>Maintenance, Repair,<br>Rehabilitation, and<br>Replacement Costs |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|---------------------------------------------------------------------------------------|
| Pay 65% of the separable costs for FY 02 and beyond, allocated to recreation, including periodic nourishment, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of breakwater features, up to 50-year limit; thereafter, 100 percent of the project costs. | <u>2,671,000</u>                                      |                                                                                       |
| Total                                                                                                                                                                                                                                                                                          | 2,671,000                                             |                                                                                       |

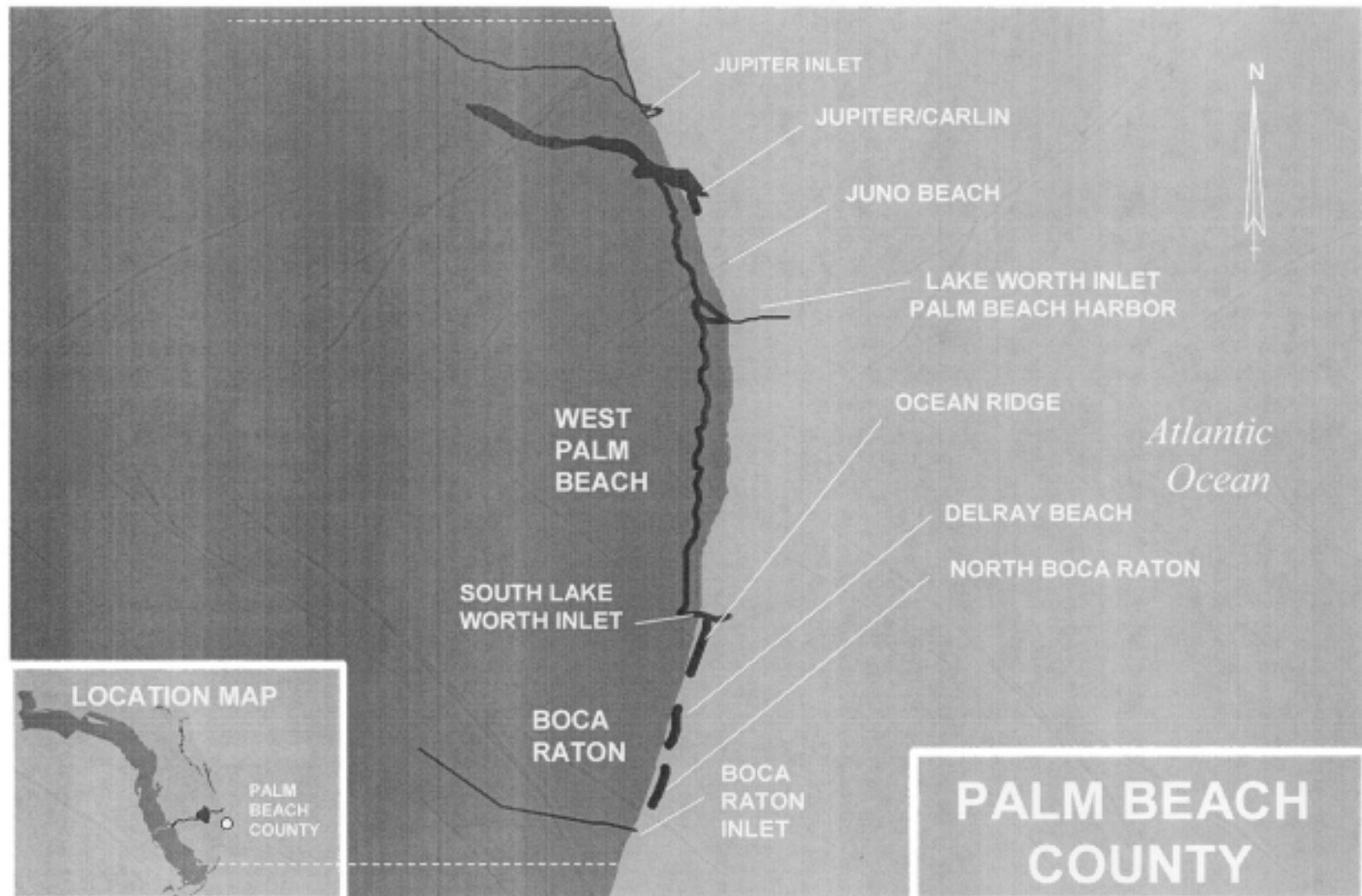
STATUS OF LOCAL COOPERATION: An initial Local Cooperation Agreement was executed in January 1973 for the Delray Beach segment. Federal participation in cost sharing was extended to 50 years based upon Section 934 of WRDA 1986. A PCA amendment will be executed to revise the local cooperation requirements in accordance with changed cost sharing requirements for periodic nourishment (35% Federal, 65% non-Federal) before the FY 02 periodic nourishment is performed. The current non-Federal cost estimate of \$207,600,000, is an increase of \$26,000,000 from the non-Federal cost estimate of \$181,600,000 based on changes in projected rates of inflation, reanalysis of requirements to reflect current and projected levels of expenditures and the cost share increase from 50% to 65%.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps) cost estimate of \$59,000,000 reflects a decrease of \$26,000,000 from the latest estimate (\$85,000,000) presented to Congress (FY 2000). This change includes:

| Item                 | Amount             |
|----------------------|--------------------|
| Change in cost share | <u>-26,000,000</u> |
| Total                | -26,000,000        |

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: A county-wide GDM and EIS were prepared in 1987. An Environmental Assessment (EA) was prepared for the third periodic nourishment in 1992.

OTHER INFORMATION: Reimbursement of the Federal share of eligible costs for renourishment will be based upon review of the engineering and design, contract documents, and an audit following contract completion.



APPROPRIATION TITLE. Construction, General - Beach Erosion Control

PROJECT: St. Johns County, Florida (Continuing)

LOCATION: St. Johns County is located about 100 miles south of the Florida/Georgia border. The beach erosion control project itself is located at the City of St. Augustine Beach. The project area lies along a 2.5-mile stretch of shoreline, beginning approximately 14,500 feet south of the St. Augustine Inlet.

DESCRIPTION: The project as authorized provides for initial restoration of a protective beach to a width of 60 feet. Since the time of its authorization in 1986, the St. Johns County Beach Erosion Control Project shoreline has continued to deteriorate. At the north project limits, a revetment along Anastasia State Park has been flanked and is currently underwater during the majority of the tidal cycle. The city of St. Augustine Beach has found it necessary to construct a return wall along approximately 800 feet of shoreline fronting its government offices to relieve flooding due to overtopping during storm events. There is essentially no dry beach fronting the rock and rubble revetments along the majority of the project shoreline. Along the south portion of the project area, flanking of the revetment has been accompanied by near vertical scarp of the shoreline which has receded landward to within approximately 30 feet of some of the upland development. The project as designed would mitigate for impacts resulting from the Federal navigation project at St. Augustine Inlet and provide storm damage prevention benefits to the upland development. Congress appropriated funding in Fiscal Year 1994 to prepare an economic update of the project. A favorable Economic Update Report for the St. Johns County, Florida Beach Erosion Control Project was approved 24 March 1995. Following the Economic Update, a General Reevaluation Report (GRR) was approved by HQUSACE November 1998 and by ASA(CW) 15 December 1998. A Project Cooperation Agreement was executed 24 August 2000.

AUTHORIZATION: Water Resources Development Act of 1986, Section 501(A).

REMAINING BENEFIT-REMAINING COST RATIO: 1.9 to 1 at 6 7/8 percent.

TOTAL BENEFIT-COST RATIO: 1.9 to 1 at 6 7/8 percent.

INITIAL BENEFIT-COST RATIO: 1.9 to 1 at 6 7/8 percent.

BASIS OF BENEFIT-COST RATIO: Basis for the benefit-cost ratio is the General Reevaluation Report (GRR) with final Environmental Assessment for the St. Johns County, Florida Shore Protection Project dated March 1998, at 1998 price level.

| SUMMARIZED FINANCIAL DATA                      |             |             | ACCUM<br>PCT OF<br>EST<br>FED COST | STATUS<br>(1 Jan 2001) | PCT<br>CMPL | PHYSICAL<br>COMPLETION<br>SCHEDULE |
|------------------------------------------------|-------------|-------------|------------------------------------|------------------------|-------------|------------------------------------|
| Estimated Federal Cost                         |             | 87,900,000  |                                    | Beach Replenishment    |             |                                    |
| Initial Construction                           | 16,513,000  |             |                                    | Initial Fill           | 0           | Jan 2002                           |
| Periodic Nourishment                           | 71,387,000  |             |                                    | Periodic Nourishment   | 0           | Being Determined                   |
| Estimated Non-Federal Cost                     |             | 141,500,000 |                                    | Entire Project         | 0           | Being Determined                   |
| Initial Construction                           | 8,891,000   |             |                                    |                        |             |                                    |
| Periodic Nourishment                           | 132,609,000 |             |                                    |                        |             |                                    |
| Total Estimated Project Cost                   |             | 229,400,000 |                                    |                        |             |                                    |
| Initial Construction                           | 25,404,000  |             |                                    |                        |             |                                    |
| Periodic Nourishment                           | 203,996,000 |             |                                    |                        |             |                                    |
| Allocations to 30 September 2000               |             | 2,106,000   |                                    |                        |             |                                    |
| Conference Allowance for FY 2001               |             | 4,000,000   |                                    |                        |             |                                    |
| Allocation for FY 2001                         |             | 4,352,000   | 1/                                 |                        |             |                                    |
| Allocations through FY 2001                    |             | 6,458,000   |                                    | 3%                     |             |                                    |
| Allocation Requested for 2002                  |             | 300,000     | 2/                                 | 3%                     |             |                                    |
| Programmed Balance to Complete after FY 2002   |             | 81,142,000  | 2/                                 |                        |             |                                    |
| Unprogrammed Balance to Complete after FY 2002 |             | 0           |                                    |                        |             |                                    |

1/ Reflects \$640,000 reduction assigned as savings and slippage, \$1,000,000 reprogrammed to the project, and \$8,000 rescinded in accordance with the Consolidated Appropriations Act, 2001

2/ Reflects 65% non-federal cost share.

JUSTIFICATION: The project, as identified in the General Reevaluation Report (GRR), provides total annual reduction of damages to development of \$4,585,000. Incidental recreation benefits amount to \$216,000. The annual cost is \$2,552,000. The benefit-to-cost ratio is 1.9 to 1.0. Also, the City of St. Augustine Beach allocated \$300,000 for the repair of the existing seawall fronting city-owned property. Highway A1A traverses the project area and is designated as a hurricane evacuation route. Past northeasters have caused considerable flooding and damage to the road, rendering it impassible. A portion of the highway at the north end of the study area was relocated landward due to the severity of the erosion problems. In addition, the construction and subsequent maintenance of the navigation works at St. Augustine Harbor by the Federal government have altered the littoral processes in the vicinity of the inlet. As a result, erosion of the 2.5-mile project area was doubled. Congress, in recognition of the need to mitigate the erosion attributed to the Federal navigation works, authorized increased Federal cost sharing in the shore protection project. Cost sharing for this project is 80.5 percent Federal and 19.5 percent non-Federal. Average annual benefits for the NED plan identified in the GRR are as follows:

| Annual Benefits         | Amount         |
|-------------------------|----------------|
| Storm Damage Prevention | 4,585,000      |
| Recreation Benefits     | <u>216,000</u> |
| Total                   | 4,801,000      |

FISCAL YEAR 2002: The requested amount will be applied as follows:

|                               |               |
|-------------------------------|---------------|
| Continue initial/advance fill | 276,000       |
| Construction management       | <u>24,000</u> |
| Total                         | 300,000       |

NON-FEDERAL COST: In accordance with the cost-sharing financing concepts reflected in the General Reevaluation Report with Environmental Assessment for the St. Johns County, Florida Shore Protection Project dated March 1998, the non-Federal sponsor must comply with the requirements listed below.

| Requirements of Local Cooperation                                                                                                                                                                                          | Payments During Construction and Reimbursements | Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|------------------------------------------------------------------------------|
| Pay 19.5 percent of the costs through FY01 allocated to initial fill                                                                                                                                                       | 450,000                                         | 0                                                                            |
| Pay 65% of the separable costs for FY02 and beyond, allocated to recreation, including periodic nourishment, and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of breakwater features. | <u>141,050,000</u>                              | 0                                                                            |
| Total Non-Federal Costs                                                                                                                                                                                                    | 141,500,000                                     | 0                                                                            |

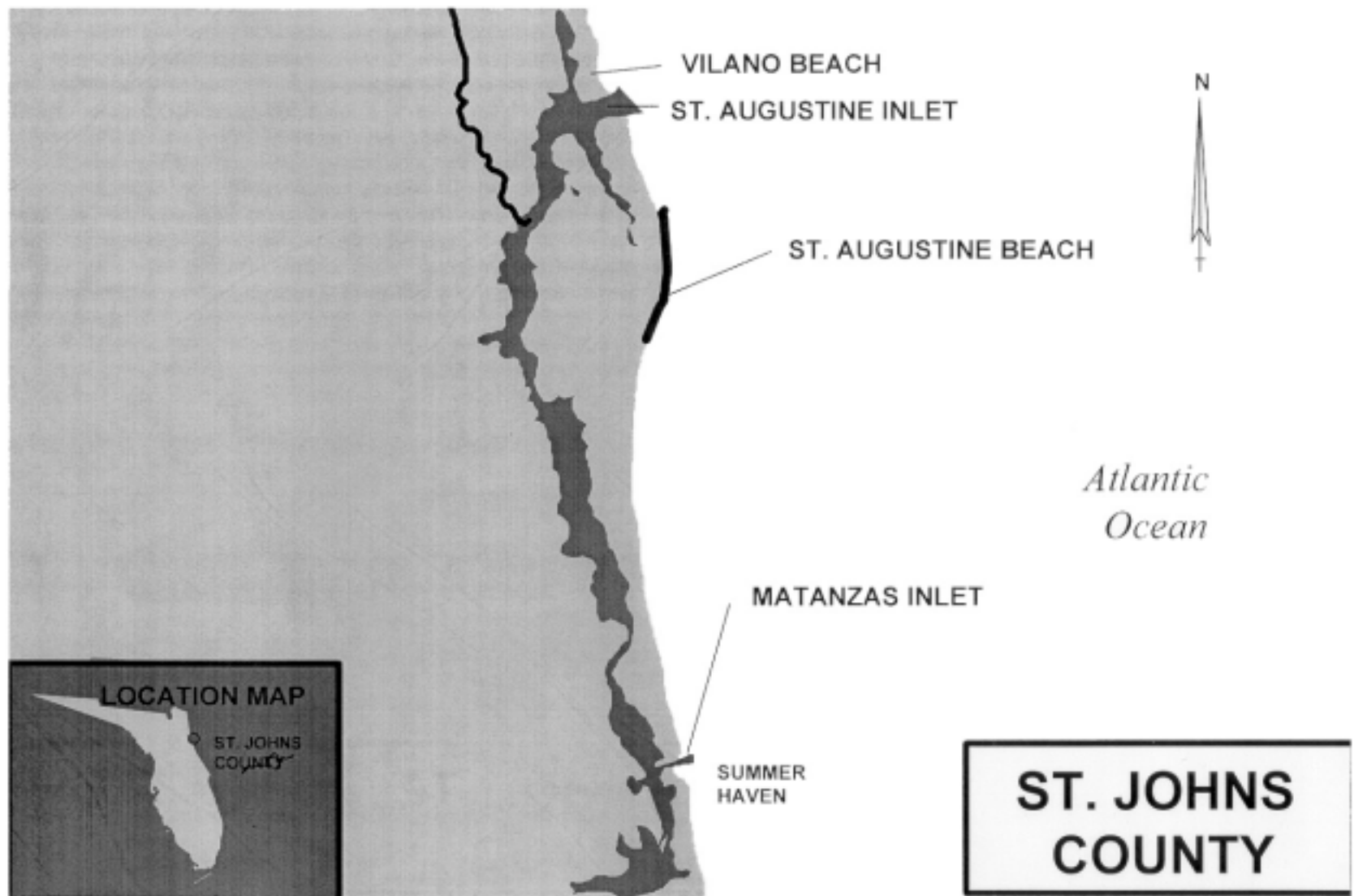


STATUS OF LOCAL COOPERATION: A Project Cooperation Agreement was executed 24 August 2000 between the St. Johns County Board of Commissioners and the Federal Government. A PCA amendment will be executed to revise the local cooperation requirements in accordance with changed cost sharing requirements for periodic nourishment (35% Federal, 65% non-Federal) before the FY 02 periodic nourishment is performed. The current non-Federal cost estimate of \$141,500,000, is an increase of \$96,800,000 from the non-Federal cost estimate of \$44,700,000 based on changes in projected rates of inflation, reanalysis of requirements to reflect current and projected levels of expenditures and the cost share increase from 50% to 65%.

COMPARISON OF FEDERAL COST ESTIMATES: Initial estimate submission; therefore, no comparison applicable.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT (EIS): A final EIS was prepared and included in the Feasibility Report for the St. Johns County Beach Erosion Control Project, which was subsequently authorized in the Water Resource Development Act of 1986. An Environmental Assessment and a FONSI (Finding-of-No-Significant-Impact) is included in the GRR approved by ASA(CW), 15 December 1998.

OTHER INFORMATION: FY 2001 funds are being used to complete the preparation of plans and specifications and initiate construction. FY 2002 funds will be used to continue construction of the project.



APPROPRIATION TITLE: Construction, General - Shore Protection

PROJECT: Brunswick County Beaches, NC - Ocean Isle Beach Portion (Continuing)

LOCATION: The project is located Brunswick County, North Carolina.

DESCRIPTION: The selected plan for Ocean Isle includes a continuous vegetated dune and berm stabilized by periodic nourishment. The dune crown width is 25 feet at elevation 9.5 feet national geodetic vertical datum (NGVD) fronted by a berm having a width of 50 feet at elevation 7 feet NGVD for a distance of 5,150 feet, then a berm having a crown width of 50 feet at elevation 7 feet NGVD for a distance of 6,300 feet, then a berm with a crown width of 25 feet at elevation 7 feet NGVD for a distance of 3,450 feet. The transition on the eastern end will be 700 feet and 1,500 feet on the western end. The beach segment is a total of 17,100 feet in length.

AUTHORIZATION: Flood Control Act of 1966.

REMAINING BENEFIT-REMAINING COST RATIO: 2.2 to 1 at 6-7/8 percent.

TOTAL BENEFIT-COST RATIO: 1.9 to 1 at 6-7/8 percent.

INITIAL BENEFIT - COST RATIO: 2.0 to 1 at 7-1/8 percent (FY2000).

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluation contained in the General Reevaluation Report approved May 1998 at October 1995 price levels.

| SUMMARIZED FINANCIAL DATA                      |             |              | ACCUM<br>PCT OF EST<br>FED COST | STATUS<br>(1 Jan 2001) | PERCENT<br>COMPLETE | PHYSICAL<br>COMPLETION<br>SCHEDULE |
|------------------------------------------------|-------------|--------------|---------------------------------|------------------------|---------------------|------------------------------------|
| Estimated Federal Cost                         |             |              | \$56,340,000                    | Entire Project         | 17                  | Being Determined                   |
| Initial Construction                           | \$9,370,000 |              |                                 |                        |                     |                                    |
| Periodic Nourishment                           | 46,970,000  |              |                                 |                        |                     |                                    |
| Estimated Non-Federal Cost                     |             |              | \$ 90,660,000                   |                        |                     |                                    |
| Initial Construction                           |             | \$3,430,000  |                                 |                        |                     |                                    |
| Cash Contributions                             | \$2,956,000 |              |                                 |                        |                     |                                    |
| Other Costs                                    | 474,000     |              |                                 |                        |                     |                                    |
| Periodic Nourishment                           |             | \$87,230,000 |                                 |                        |                     |                                    |
| Cash Contributions                             | 87,019,000  |              |                                 |                        |                     |                                    |
| Other Costs                                    | 211,000     |              |                                 |                        |                     |                                    |
| Total Estimated Project Cost                   |             |              | \$147,000,000                   |                        |                     |                                    |
| Initial Construction                           | 12,800,000  |              |                                 |                        |                     |                                    |
| Future Nourishment                             | 134,200,000 |              |                                 |                        |                     |                                    |
| Allocations to 30 September 2000               |             |              | \$ 5,226,000                    |                        |                     |                                    |
| Conference Allowance for FY 2001               |             |              | 4,200,000                       |                        |                     |                                    |
| Allocation for FY 2001                         |             |              | 4,192,000                       | <u>1/</u>              |                     |                                    |
| Allocations through FY 2001                    |             |              | 9,418,000                       |                        | 17                  |                                    |
| Allocation Requested for 2002                  |             |              | 300,000                         | <u>2/</u>              | 17                  |                                    |
| Programmed Balance to Complete after FY 2002   |             |              | 46,622,000                      | <u>2/</u>              |                     |                                    |
| Unprogrammed Balance to Complete after FY 2002 |             |              | 0                               |                        |                     |                                    |

1/ \$8,000 rescinded in accordance with the Consolidated Appropriations Act, 2001.

2/ Reflects 65% non-Federal cost share.

Division: South Atlantic

District: Wilmington

Brunswick County Beaches, NC - Ocean Isle Beach Portion

3 April 2001

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# PHYSICAL DATA

|                 | Elevation     | Crown Width | Length     |
|-----------------|---------------|-------------|------------|
| Dune            | 9.5 feet NGVD | 25 feet     | 5,150 feet |
| Integral Berm   | 7 feet NGVD   | 50 feet     | 5,150 feet |
| Berm            | 7 feet NGVD   | 50 feet     | 6,300 feet |
|                 | 7 feet NGVD   | 25 feet     | 3,450 feet |
| Transition-East | -             | -           | 700 feet   |
| West            | -             | -           | 1,500 feet |

JUSTIFICATION: The project area has experienced severe property damage and beach erosion as a result of storm surges from northeasters and hurricanes in recent years. The project area currently has an erosion rate of 1.5 feet per year. The estimated value of damageable structures and roads is \$123,000,000 with annual damages without a project of \$8,075,000. The project will also result in economic benefits for improved recreation and navigation. The navigation benefits will result from dredging of Shallotte Inlet to obtain sand for project construction and subsequent beach nourishment operations. Hurricane Hugo caused damages of \$11,600,000 in September 1989. Average annual benefits are as follows:

| Annual Benefits                    | Amount      |
|------------------------------------|-------------|
| Hurricane & Storm Damage Reduction | \$1,767,000 |
| Long Term Erosion                  | 519,000     |
| Recreation                         | 353,000     |
| Navigation                         | 55,000      |
| Total                              | \$2,694,000 |

FISCAL YEAR 2002: The requested amount of will be applied as follows:

|                                                                              |           |
|------------------------------------------------------------------------------|-----------|
| Planning, Engineering, and Design for Oak Island, Caswell and Holden Beaches | \$300,000 |
| Total                                                                        | \$300,000 |

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the town of Ocean Isle Beach, North Carolina, as non-Federal sponsor, must comply with the requirements listed below:

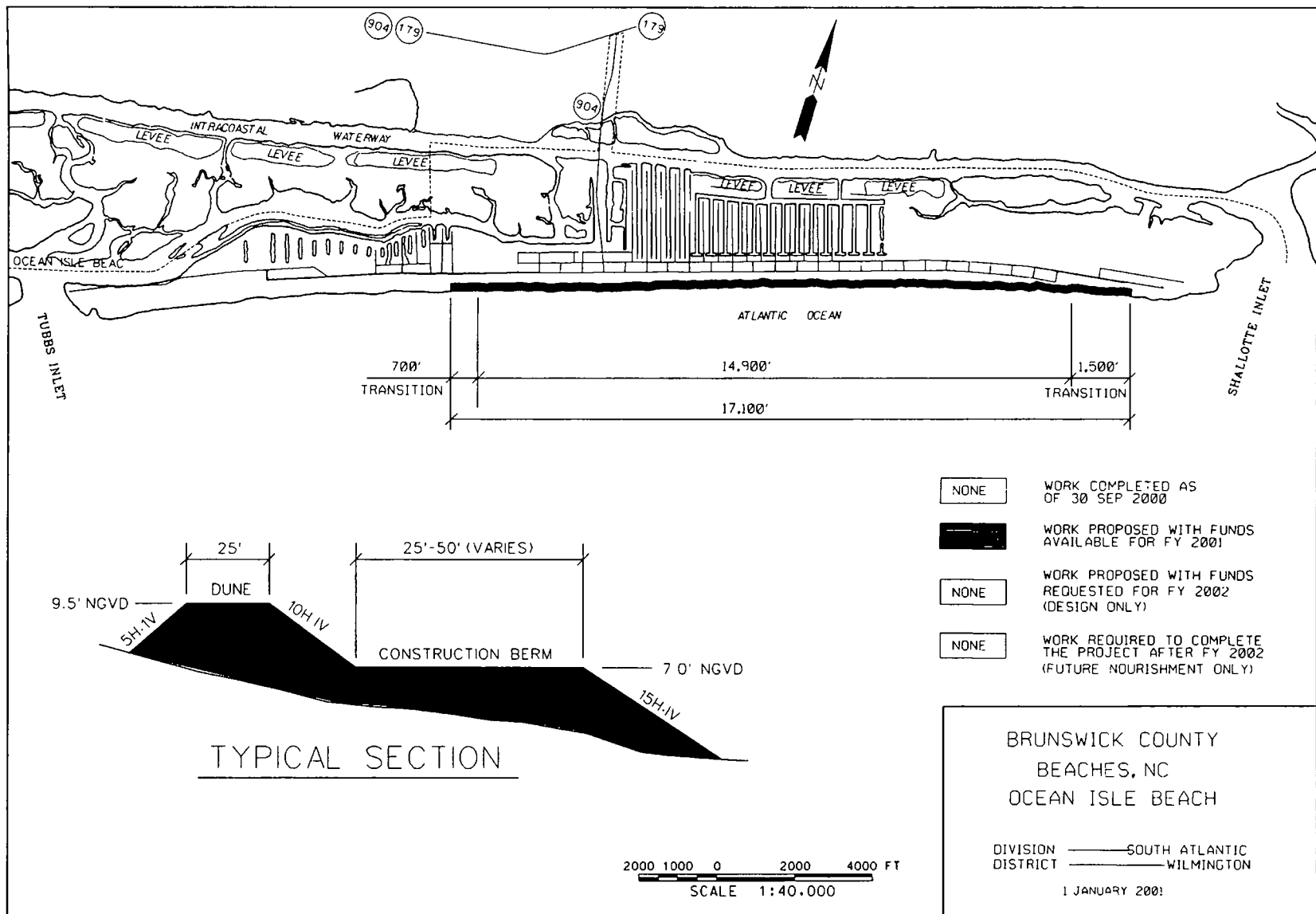
| Requirements of local Cooperation                                                                                                                                                                                                          | Payments During Construction and Reimbursements | Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|------------------------------------------------------------------------------|
| Provide lands, easements, rights of way, Including suitable borrow areas and dredged material disposal areas.                                                                                                                              | \$ 685,000                                      |                                                                              |
| Pay 35 percent of the initial construction cost allocated to hurricane and storm damage reduction and bear all costs of operation, maintenance, repair, rehabilitation and replacement of hurricane and storm damage reduction facilities. | 2,956,000                                       | \$101,000                                                                    |
| Pay 65 percent of the periodic nourishment cost allocated to hurricane and storm damage reduction and bear all costs of operation, maintenance, repair, rehabilitation and replacement of hurricane and storm damage reduction facilities. | 87,019,000                                      | 101,000                                                                      |
| Total Non-Federal Costs                                                                                                                                                                                                                    | \$90,660,000                                    | \$101,000                                                                    |
| The non-Federal sponsor has agreed to make all required payments concurrently with project construction.                                                                                                                                   |                                                 |                                                                              |

STATUS OF LOCAL COOPERATION: The Town of Ocean Isle Beach is the project sponsor. By letter dated January 17, 1997, the local sponsor agreed to provide the terms of local cooperation and expressed their intent to enter into a project cooperation agreement. The non-Federal share will be provided through local taxes and State contributions. The PCA was executed on 9 January 2001. A PCA amendment will be executed to revise the local cooperation requirements in accordance with changed cost sharing requirements for periodic nourishment (35 percent Federal, 65 percent non-Federal) before the first periodic nourishment is performed.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$56,340,000 is the initial estimate presented to Congress.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An environmental assessment for Ocean Isle was prepared in June 1997 and a Finding of No Significant Impact was signed by the District Engineer on 1 October 1997.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in fiscal year 1970. The completion of a General Reevaluation Report (GRR) for Oak Island, Caswell and Holden Beaches is being determined.



Division: South Atlantic

District: Wilmington

Brunswick County Beaches, NC - Ocean Isle Beach Portion

3 April 2001

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APPROPRIATION TITLE: Construction, General - Shore Protection

PROJECT: West Onslow Beach and New River Inlet (Topsail Beach), North Carolina (Continuing)

LOCATION: The project is located in the Town of Topsail Beach at the southern end of Topsail Island in Pender County on the central North Carolina Coast. Topsail Island is a barrier island located approximately 40 miles northeast of Wilmington, North Carolina.

DESCRIPTION: The authorized plan of improvement consists of a sand dune constructed to an elevation of 13 feet above mean sea level (MSL), fronted by a storm berm constructed to an elevation of 9 feet above mean sea level and a beach (natural) berm constructed to an elevation of 7 feet above mean sea level along 9,500 feet of shoreline; two transition sections constructed to elevation 7 feet above mean sea level along the southern and northern ends will be included along 2,400 feet and 6,860 feet respectively; and renourishment of the project at approximately two year intervals. The borrow area, located in Banks Channel, will be dredged to a depth of 20 feet below mean low water (MLW) and will be 200 feet wide. The access channel through Topsail Inlet will be dredged to a depth of 17 feet below mean low water. All work is programmed.

AUTHORIZATION: Water Resources Development Act of 1992.

REMAINING BENEFIT-REMAINING COST RATIO: 1.3 to 1 at 8 ½ percent.

TOTAL BENEFIT-COST RATIO: 1.3 to 1 at 8 ½ percent.

INITIAL BENEFIT-COST RATIO: 1.5 to 1 at 8-1/2 percent (FY 1994)

BASIS OF BENEFIT-COST RATIO: Benefits are from the Chief of Engineers Report dated November 1991 at October 1990 price levels.



| SUMMARIZED FINANCIAL DATA                      |             |               | ACCUM<br>PCT OF<br>EST<br>FED COST | STATUS<br>(1 Jan 2001) | PERCENT<br>COMPLETE | PHYSICAL<br>COMPLETION<br>SCHEDULE |
|------------------------------------------------|-------------|---------------|------------------------------------|------------------------|---------------------|------------------------------------|
| Estimated Federal Cost                         |             | \$83,300,000  |                                    | Initial Construction   | 0                   | Being Determined                   |
| Initial Construction                           | 14,300,000  |               |                                    | Future Nourishment     | 0                   | Being Determined                   |
| Periodic Nourishment                           | 69,000,000  |               |                                    | Entire Project         | 0                   | Being Determined                   |
| Estimated Non-Federal Cost                     |             | \$134,700,000 |                                    |                        |                     |                                    |
| Initial Construction                           |             | 7,700,000     |                                    |                        |                     |                                    |
| Cash Contributions                             | 4,400,000   |               |                                    |                        |                     |                                    |
| Other Costs                                    | 3,300,000   |               |                                    |                        |                     |                                    |
| Periodic Nourishment                           |             | 127,000,000   |                                    |                        |                     |                                    |
| Cash Contributions                             | 127,000,000 |               |                                    |                        |                     |                                    |
| Other Costs                                    | 0           |               |                                    |                        |                     |                                    |
| Total Estimated Project Cost                   |             | \$218,000,000 |                                    |                        |                     |                                    |
| Initial Construction                           | 22,000,000  |               |                                    |                        |                     |                                    |
| Future Nourishment                             | 196,000,000 |               |                                    |                        |                     |                                    |
| Allocations to 30 September 2000               |             | \$ 423,000    |                                    |                        |                     |                                    |
| Conference Allowance for FY 2001               |             | 330,000       |                                    |                        |                     |                                    |
| Allocation for FY 2001                         |             | 276,000       | 1/                                 |                        |                     |                                    |
| Allocations through FY 2001                    |             | 699,000       |                                    |                        | 1                   |                                    |
| Allocation Requested for 2002                  |             | 300,000       | 2/                                 |                        | 1                   |                                    |
| Programmed Balance to Complete after FY 2002   |             | 82,301,000    | 2/                                 |                        |                     |                                    |
| Unprogrammed Balance to Complete after FY 2002 |             | 0             |                                    |                        |                     |                                    |

1/ Reflects \$53,000 reduction assigned as savings and slippage and \$ 1,000 rescinded in accordance with the Consolidated Appropriations Act, 2001.

2/ Reflects 65% non-Federal cost share.

Division: South Atlantic

District: Wilmington

West Onslow Beach and New River Inlet (Topsail Beach), NC

3 April 2001

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Project Dimensions:  
 Shoreline – 18,760 feet  
 Main Fill – 9,500 feet  
 South transition – 2,400 feet  
 North transistion – 6,860 feet

PHYSICAL DATA  
 Berm and Dune Elevation:  
 Dune – 13.0 feet above MSL  
 Storm berm – 9.0 feet above MSL  
 Beach (natural) berm – 7.0 feet MSL

Borrow Area:  
 Access Channel -- 243 acres  
 Width – 200 feet  
 Depth – 17 feet below MLW

JUSTIFICATION: The Town of Topsail Beach has experienced severe beach erosion and heavy property damage as a result of storm surges from hurricanes in 1996 and 1999 and northeasters over the recent years. In addition to property damage these storms have severely damaged or destroyed the primary dune system. The average annual erosion rate is 4.5 feet per year. Topsail Beach is vulnerable to damages of more than \$50 million from a hurricane with a 3.33 percent chance of occurrence in any year. Losses to these structures and related damages would result in a tremendous loss to the Town's tax base. The recommended improvements are essential to the economic welfare of the Town of Topsail Beach. Average annual benefits are as follows:

| Annual Benefits             | Amount      |
|-----------------------------|-------------|
| Hurricane Damage Prevention | \$2,840,000 |
| Recreation                  | 226,000     |
| Total                       | \$3,066,000 |

FISCAL YEAR 2002: The requested amount will be applied as follows:

|                                                    |            |
|----------------------------------------------------|------------|
| Planning, Engineering and Design for Topsail Beach | \$ 300,000 |
| Total                                              | \$ 300,000 |

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

| Requirements of local Cooperation                                                                                                                                                                                                           | Payments During Construction and Reimbursements | Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|------------------------------------------------------------------------------|
| Provide lands, easements, rights of way, Including suitable borrow areas and dredged material disposal areas.                                                                                                                               | \$ 3,300,000                                    |                                                                              |
| Pay 35 percent of the initial construction cost allocated to hurricane and storm damage reduction and bear all costs of operation, maintenance, repair, rehabilitation and replacement of hurricane and storm damage reduction facilities.  | 4,400,000                                       | \$100,000                                                                    |
| Pay 65 percent of the periodic nourishment cost allocated to hurricane and storm damage reduction and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of hurricane and storm damage reduction facilities. | 127,000,000                                     | 100,000                                                                      |
| Total Non-Federal Costs                                                                                                                                                                                                                     | \$134,700,000                                   | \$100,000                                                                    |

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

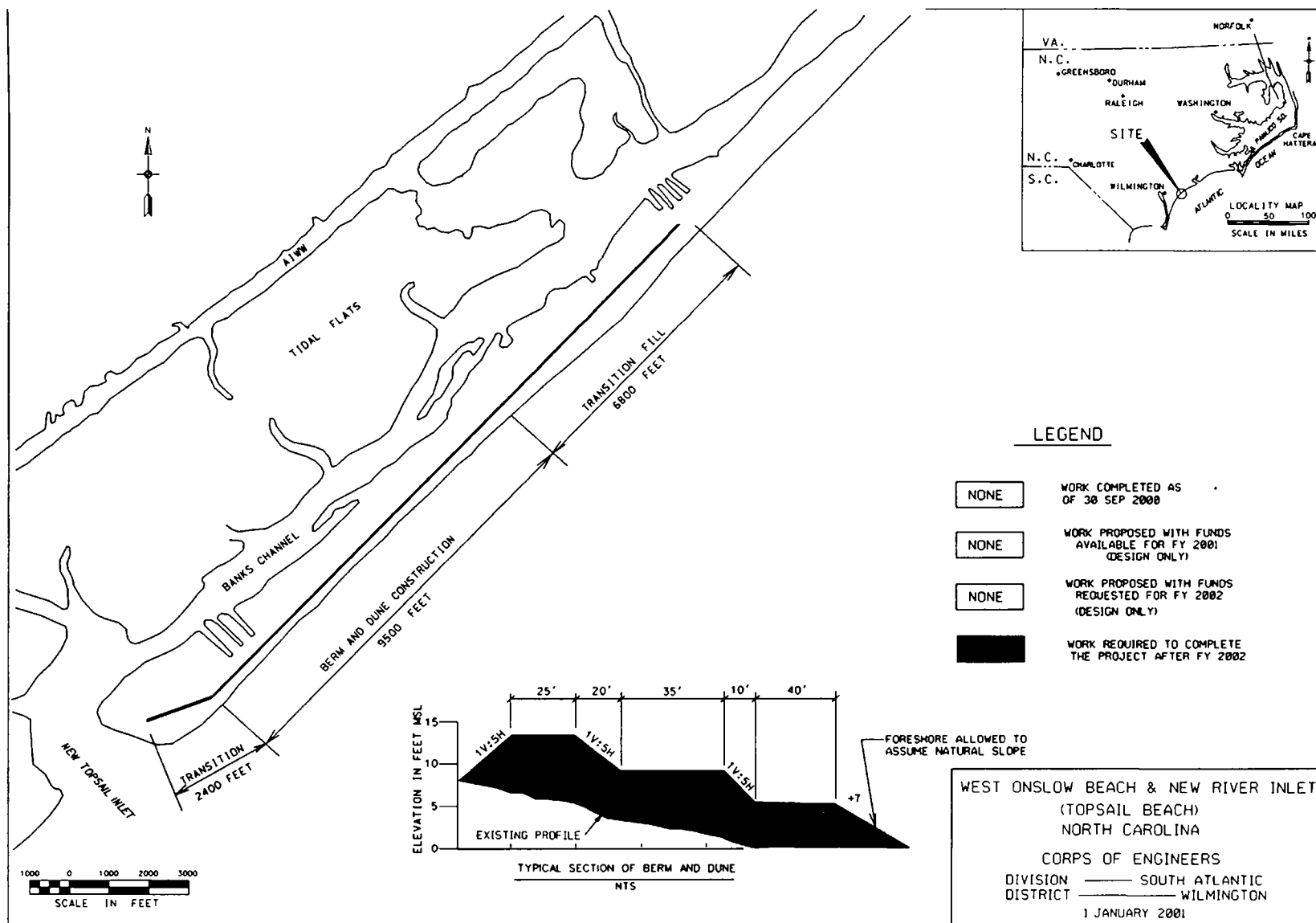
STATUS OF LOCAL COOPERATION: The Town of Topsail Beach, North Carolina, is the project sponsor. The State of North Carolina will provide the primary financial assistance (subject to its own funding restraints) for the project sponsor. The current schedule is to execute the Project Cooperation Agreement (PCA) in April 2002. The PCA will reflect the revision in local cooperation requirements in accordance with changed cost sharing requirements for periodic nourishment (35% Federal, 65% non-Federal for periodic nourishment). This project was placed in the inactive category in July 1994 due to lack of local support. Local interests are now able to and would support the project.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps) cost estimate of \$83,300,000 is a decrease of \$8,500,000 from the latest estimate (91,800,000) presented to Congress (FY 1993). This change includes the following items.

| Item                                      | Amount       |
|-------------------------------------------|--------------|
| Price Escalation on Construction Features | \$51,200,000 |
| Change in Cost Share                      | -59,700,000  |
| Total                                     | -\$8,500,000 |

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final EIS was filed with EPA in February 1991.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1990. This project initially received a new construction start for FY 94; however, the project cooperation agreement was not executed due to the Sponsor's inability to fund their share of the project cost. The cost estimate was updated for price escalation only. The first items to be accomplished with construction funds will be execution of the project cooperation agreement and preparation of a general reevaluation report to redefine the project scope.



Division: South Atlantic

District: Wilmington

West Onslow Beach and New River Inlet (Topsail Beach), NC

3 April 2001

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APPROPRIATION TITLE: Construction, General - Local Protection Projects (Flood Control)

PROJECT: Wrightsville Beach, North Carolina (Continuing)

LOCATION: The project is located on a small island off the southeast coast of North Carolina, approximately 10 miles east of Wilmington in New Hanover County.

DESCRIPTION: The project provides for construction of a dune with a crown width of 25 feet at an elevation of 15 feet above mean low water and a berm with a crown width of 50 feet and a top elevation of 12 feet above mean low water for a distance of 14,000 feet. Federal participation in future nourishment was initially authorized for 10 years but was extended for the life of the project by Water Resources Development Act of 1986. All work is programmed.

AUTHORIZATION: Flood Control Act of 1962 and the Water Resources Development Act of 1986.

REMAINING BENEFIT - REMAINING COST RATIO: Not applicable because initial fill has been completed.

TOTAL BENEFIT - COST RATIO: 1.5 to 1 at 8-5/8 percent.

INITIAL BENEFIT - COST RATIO: 3.5 to 1 at 3.0 percent (FY 1965).

BASIS OF BENEFIT - COST RATIO: Benefits are from the latest available evaluation approved in October 1989 at February 1989 price levels.

| SUMMARIZED FINANCIAL DATA                      |              |              | ACCUM<br>PCT OF<br>EST<br>FED COST | STATUS<br>(1 Jan 2001) | PERCENT<br>COMPLETE | PHYSICAL<br>COMPLETION<br>SCHEDULE |
|------------------------------------------------|--------------|--------------|------------------------------------|------------------------|---------------------|------------------------------------|
| Estimated Federal Cost                         |              | \$16,300,000 |                                    | Entire Project         | 28                  | Being Determined                   |
| Initial Construction                           | \$ 713,000   |              |                                    |                        |                     |                                    |
| Periodic Nourishment                           | 15,587,000   |              | 1/                                 |                        |                     |                                    |
| Estimated Non-Federal Cost                     |              | \$25,000,000 |                                    |                        |                     |                                    |
| Initial Construction                           | \$ 345,000   |              |                                    |                        |                     |                                    |
| Cash Contributions                             | \$ 345,000   |              |                                    |                        |                     |                                    |
| Other Costs                                    | 0            |              |                                    |                        |                     |                                    |
| Periodic Nourishment                           |              | \$24,655,000 |                                    |                        |                     |                                    |
| Cash Contributions                             | 24,655,000   |              |                                    |                        |                     |                                    |
| Other Costs                                    | 0            |              |                                    |                        |                     |                                    |
| Total Estimated Project Cost                   |              | \$41,300,000 |                                    |                        |                     |                                    |
| Initial Construction                           | \$ 1,058,000 |              |                                    |                        |                     |                                    |
| Future Nourishment                             | 40,242,000   |              |                                    |                        |                     |                                    |
| Allocations to 30 September 2000               |              | \$ 4,609,000 |                                    |                        |                     |                                    |
| Conference Allowance for FY 2001               |              | 0            |                                    |                        |                     |                                    |
| Allocation for FY 2001                         |              | 0            |                                    |                        |                     |                                    |
| Allocations through FY 2001                    |              | 4,609,000    | 28                                 |                        |                     |                                    |
| Allocation Requested for 2002                  |              | 550,000      | 2/ 32                              |                        |                     |                                    |
| Programmed Balance to Complete after FY 2002   |              | 20,359,000   | 2/                                 |                        |                     |                                    |
| Unprogrammed Balance to Complete after FY 2002 |              | 0            |                                    |                        |                     |                                    |

1/ Based on 50 years of future nourishment. Authorization was for life of project.

2/ Reflects 65% non-Federal cost share.

# PHYSICAL DATA

|             | Dune              | Integral Berm     | Feeder Berm       |
|-------------|-------------------|-------------------|-------------------|
| Elevation   | 15 feet above MLW | 12 feet above MLW | 12 feet above MLW |
| Crown Width | 25 feet           | 50 feet           | 120 feet          |
| Length      | 14,000 feet       | 14,000 feet       | 3,000 feet        |

JUSTIFICATION: The project provides shore protection from erosion and hurricane flood protection. Wrightsville Beach experienced heavy losses during the hurricanes of 1944, 1954, 1955, 1958, and 1960. It is estimated that recurrence of those hurricanes would cause damages of about \$28,469,000 based on 1982 level of development and 1 October 2000 prices. The improvement will prevent or reduce damages to the beach and property along the beach by providing full shore protection and partial hurricane flood protection from hurricanes of equal or less intensity than that of Hurricane Hazel, provide increased area for recreational use, and increased earning power for shore-front and other property in the affected community. Average annual benefits are as follows:

| Annual Benefits             | Amount    |
|-----------------------------|-----------|
| Hurricane Damage Prevention | \$570,100 |
| Recreation                  | 353,300   |
| Total                       | \$923,400 |

FISCAL YEAR 2002: The requested amount will be applied as follows:

|                                            |            |
|--------------------------------------------|------------|
| Initiate and Complete Periodic Nourishment | \$ 440,000 |
| Planning, Engineering and Design           | 70,000     |
| Construction Management                    | 40,000     |
| Total                                      | \$550,000  |



NON-FEDERAL COST: The actual cost to the Town of Wrightsville Beach, North Carolina, the local sponsor, of complying with the requirements of local cooperation for initial construction and the completed periodic nourishment as set forth in the initial authorizing legislation was \$1,405,000. In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below for the remaining future nourishment.

| Requirements of local Cooperation                                                                                                                                                                                                          | Payments During Construction and Reimbursements | Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|------------------------------------------------------------------------------|
| Provide lands, easements, rights of way, and dredged material disposal areas.                                                                                                                                                              |                                                 |                                                                              |
| Modify or relocate utilities, roads, and other facilities, where necessary for the construction of the project.                                                                                                                            |                                                 |                                                                              |
| Pay 35 percent of the cost thru FY01 allocated to hurricane and storm damage reduction and bear all costs of operation, maintenance, repair, rehabilitation and replacement of hurricane and storm damage reduction facilities.            | \$2,978,000                                     | \$4,900                                                                      |
| Pay 65 percent of the costs for FY02 and beyond allocated to hurricane and storm damage reduction and bear all costs of operation, maintenance, repair, rehabilitation and replacement of hurricane and storm damage reduction facilities. | 22,022,000                                      | 4,900                                                                        |
| Total Non-Federal Costs                                                                                                                                                                                                                    | \$25,000,000                                    | \$4,900                                                                      |

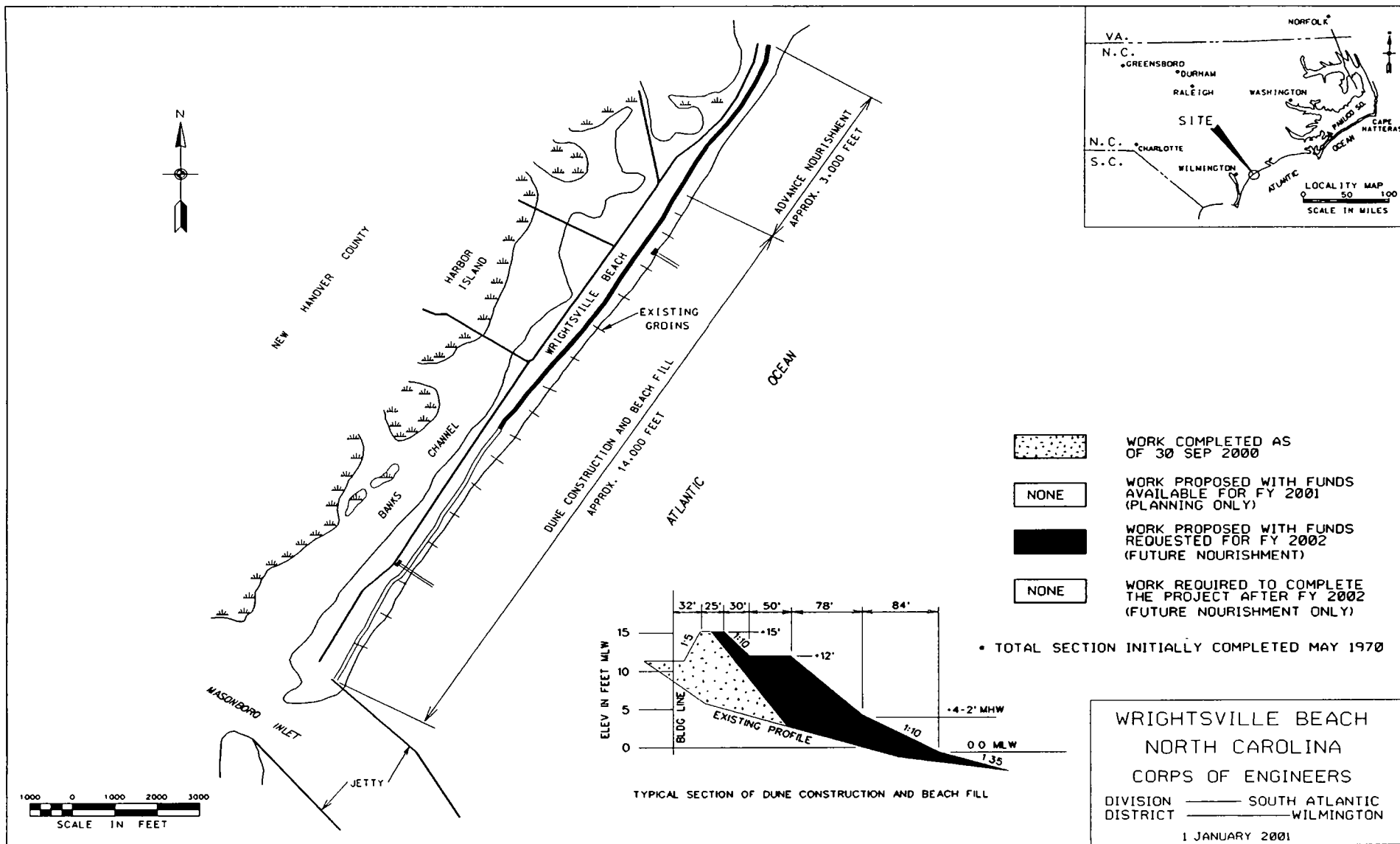
STATUS OF LOCAL COOPERATION: The Town of Wrightsville Beach has complied with all the terms of local cooperation to date including initial construction and future nourishment through FY 1998. On 1 November 1983, a local occupancy tax went into effect in New Hanover County. Seventy-five percent of the revenues collected from this tax must be used for beach erosion control. A local cooperation agreement (LCA) was executed by ASA(CW) on 27 June 1990. A LCA amendment will be executed to revise the local cooperation requirements in accordance with changed cost sharing requirements for periodic nourishment (35 percent Federal, 65 percent non-Federal) before the FY 02 periodic nourishment is performed.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps) cost estimate of \$16,300,000 is a decrease of \$8,900,000 from the latest estimate (\$25,200,000) submitted to Congress (FY 1998). This change includes the following items:

| Item                                                | Amount       |
|-----------------------------------------------------|--------------|
| Price Escalation on Construction Features           | \$1,380,000  |
| Design Changes                                      | 52,000       |
| Post Contract Award and other Estimating Adjustment | -132,000     |
| Change in Cost Share                                | -10,200,000  |
| Total                                               | -\$8,900,000 |

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: A Finding of No Significant Impact was signed in August 1989.

OTHER INFORMATION: Initial construction funds were appropriated in Fiscal Year 1965. In accordance with Section 156 of the Water Resources Development Act of 1976 Federal authorization for participation in the initial project was limited to work initiated before the end of calendar year 1980. The 1986 Act authorized future nourishment for the life of the project however, a 50-year period was used for the purpose of preparing a cost estimate.



Division: South Atlantic

District: Wilmington

Wrightsville Beach, NC

3 April 2001

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APPROPRIATION TITLE: Construction, General – Deficiency Correction (Flood Control)

PROJECT: Oates Creek, Richmond County, Georgia (Continuing)

LOCATION: The project originates in the city of Augusta, Georgia and is located entirely within Richmond County, Georgia. The creek is a tributary to Butler Creek that flows into the Savannah River just downstream of the New Savannah Bluff Lock and Dam Navigation Project about 13 miles south of Augusta and 203 river miles above the mouth of the Savannah River.

DESCRIPTION: Oates Creek includes remedial work on the upper and lower earthen channels of the project. The upper channel work (about 1,650 feet) includes regrading the channel, construction of a drop structure in the moderately steep gradient to prevent the headcutting from continuing upstream, and riprapping half of the sideslope of the channel. The lower channel work (about 3,860 feet) includes regrading the design channel configuration by excavating sediment, removing damaged erosion control matting, and placement of a 12-foot-wide concrete pilot channel to contain normal flows. All work is programmed.

AUTHORIZATION: Water Resources Development Act of 1986.

REMAINING BENEFIT - REMAINING COST RATIO: 1.32 to 1 at 6 7/8 percent.

TOTAL BENEFIT - COST RATIO: 1.13 to 1 at 6 7/8 percent.

INITIAL BENEFIT - COST RATIO: 1.13 to 1 at 6 7/8 percent (FY 2001).

BASIS OF BENEFIT - COST RATIO: Benefits are from the latest available Deficiency Evaluation Reconnaissance Report dated May 1999 at July 1998 price levels.

| SUMMARIZED FINANCIAL DATA                      |            | ACCUM<br>PCT OF<br>EST<br>FED COST | STATUS<br>(1 Jan 2001) | PERCENT<br>COMPLETE | PHYSICAL<br>COMPLETION<br>SCHEDULE |
|------------------------------------------------|------------|------------------------------------|------------------------|---------------------|------------------------------------|
| Original Project                               |            |                                    | Entire Project         | 2                   | Being<br>determined                |
| Actual Federal Cost                            |            | 9,536,000                          |                        |                     |                                    |
| Actual Non-Federal Cost                        |            | 3,027,000                          |                        |                     |                                    |
| Cash Contributions                             | 665,000    |                                    |                        |                     |                                    |
| Other Costs                                    | 2,362,000  |                                    |                        |                     |                                    |
| Total Original Project Cost                    | 12,563,000 |                                    |                        |                     |                                    |
| Remedial Work or Project Modification          |            |                                    |                        |                     |                                    |
| Estimated Federal Cost                         |            | 1,672,000                          |                        |                     |                                    |
| Estimated Non-Federal Cost                     |            | 558,000                            |                        |                     |                                    |
| Cash Contributions                             | 558,000    |                                    |                        |                     |                                    |
| Other Costs                                    | 0          |                                    |                        |                     |                                    |
| Total Estimated Remedial or Modification Cost  |            | 2,230,000                          |                        |                     |                                    |
| Total Estimated Project Cost                   |            | 14,793,000                         |                        |                     |                                    |
| Allocations to 30 September 2000               |            | 0                                  |                        |                     |                                    |
| Conference Allowance for FY 2001               |            | 332,000                            |                        |                     |                                    |
| Allocation for FY 2001                         |            | 203,000                            | 1/                     |                     |                                    |
| Allocations through FY 2001                    |            | 203,000                            |                        | 12                  |                                    |
| Allocation Requested for 2002                  |            | 632,000                            |                        | 50                  |                                    |
| Programmed Balance to Complete after FY 2002   |            | 837,000                            |                        |                     |                                    |
| Unprogrammed Balance to Complete after FY 2002 |            | 0                                  |                        |                     |                                    |

1/ Reflects \$53,000 reduction assigned as savings and slippage, \$75,000 reprogrammed from the project, and \$1,000 rescinded in accordance with the Consolidated Appropriations Act, 2001.

Division: South Atlantic

District: Savannah

Oates Creek, Richmond County, GA

3 April 2001

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#### PHYSICAL DATA

##### Upper Earthen Channel:

For a distance of 1,650 feet regrade the channel, construct a drop structure to prevent the headcutting from continuing upstream, and riprap half of the channel sideslope.

##### Lower Earthen Channel:

For a distance of 3,860 feet regrade the design channel grade, remove damaged channel matting, placement of a 12-foot-wide concrete pilot channel, and placement of Geonet fabric on channel bottom to encourage drainage.

**JUSTIFICATION:** The Corps of Engineers, with the city of Augusta, Georgia as local sponsor, completed construction of the Oates Creek Flood Control Project at a cost of \$12,563,000 in 1992. WRDA (1986), authorized the Oates Creek project that included channel widening, concrete lining of two channel reaches, grass lining of two channels reaches, several road and bridge modifications, a small levee, and utility relocations. Just 8 years later, the project is not meeting the design flood protection. Sediment buildup in the earth channel portion of the project is decreasing some portions of the channel capacity from a 10 percent exceedance probability (10-year event) protection to only a 50 percent exceedance probability (2-year event) protection. It is not physically possible to neither safely nor efficiently remove the sediment buildup to maintain design flow. The project is designed to provide protection to about 350 homes and 70 industries in the area.

**FISCAL YEAR 2002:** The requested amount of \$632,000 will be applied as follows:

|                                  |           |
|----------------------------------|-----------|
| Initiate Construction            | 440,000   |
| Planning, Engineering and Design | 125,000   |
| Construction Management          | 67,000    |
| Total                            | \$632,000 |

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the authorizing legislation and the Water Resources Development Act of 1986 and 1996, as applicable, the non-Federal sponsor must comply with the requirements listed below:

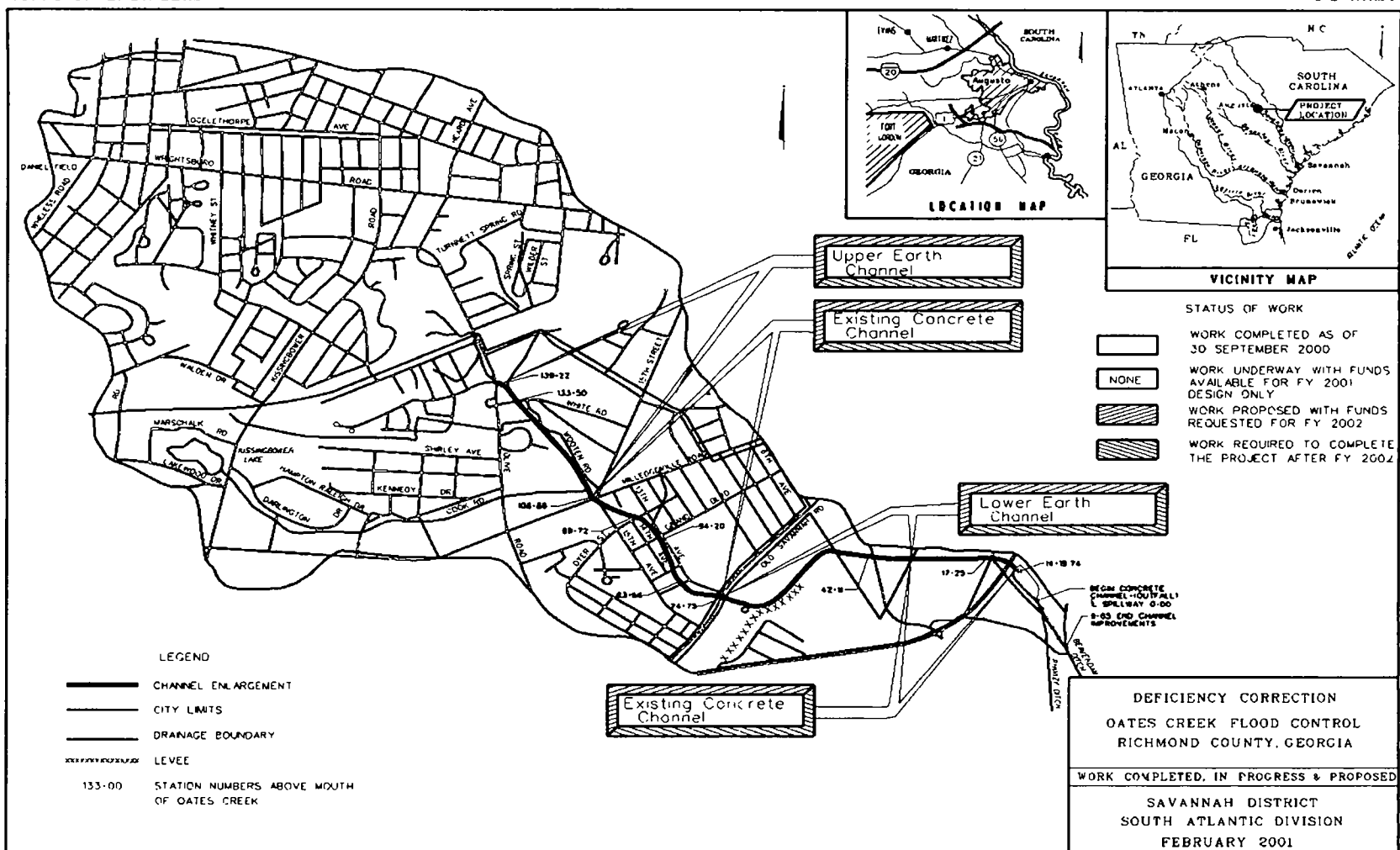
| Requirements of local Cooperation                                                                                                                                                                                                                                                                                                                                                                                                      | Payments During Construction and Reimbursements | Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|------------------------------------------------------------------------------|
| Provide lands, easements, rights of way, relocations, and borrow and excavated or dredged material disposal areas.                                                                                                                                                                                                                                                                                                                     | 0                                               |                                                                              |
| Provide a cash contribution equal to 5 percent of flood control construction costs. Pay a minimum of 25 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 25 percent, as determined under Section 103(m) of the Water Resources Development Act of 1986 and bear all costs of operation, maintenance, repair, rehabilitation and replacement of flood control facilities. | 558,000                                         | 35,000                                                                       |
| Total Non-Federal Costs                                                                                                                                                                                                                                                                                                                                                                                                                | 558,000                                         | 35,000                                                                       |

STATUS OF LOCAL COOPERATION: Augusta/Richmond County, Georgia is the local sponsor and has provided a letter of intent dated 18 May 1998 to cost share in the project. O&M expenses will be provided by the county's general fund. The Project Cooperation Agreement is scheduled to be executed in July 2001.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal Corps cost estimate of \$1,672,000 is the same as the latest estimate submitted to Congress (FY 2001).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The May 1999 Correction Deficiency Evaluation Reconnaissance Report concluded the existing environmental assessment for the original project construction adequately addresses all proposed work and further documentation is not needed.

OTHER INFORMATION: Funds to initiate construction were appropriated in FY 2001.





APPROPRIATION TITLE: Construction, General -- Local Protection Project (Flood Control)

PROJECT: Arecibo River, Puerto Rico (Continuing)

LOCATION: The city of Arecibo is located on the northern coast of Puerto Rico, approximately 40 miles west of San Juan. The Rio Arecibo Basin covers a 272 square mile area and has experienced numerous floods over recent years. The upstream towns of Utuado, Jayuya, and Adjuntas have also been subject to the frequent flooding. Extensive floods occurred in May and October 1985 and again in September 1996 with Hurricane Hortense. When Hurricane Georges hit the island in September 1998, the municipality of Arecibo experienced the 100-year flood event, resulting in significant damages to commercial and residential properties and loss of the Victor Rojas bridge.

DESCRIPTION: The proposed plan includes channel improvements, a flood wall, and a levee along the Arecibo River; a levee along the Tanama River; and a plug, channel improvements, and a diversion channel along the Santiago river.

AUTHORIZATION: Water Resource Development Act 1996, Sec 101(a)(26).

REMAINING BENEFIT - REMAINING COST RATIO 4.1 to 1 at 6 7/8 PERCENT

TOTAL BENEFIT -- COST RATIO: 4.1 to 1 at 6 7/8 PERCENT

INITIAL BENEFIT – COST RATIO: 4.1 at 6 7/8 PERCENT (FY 2000).

BASIS OF BENEFIT - COST RATIO: Benefits are from the economic analyses performed for the July 1998 Limited Reevaluation Report updated at October 1998 price levels.

| SUMMARIZED FINANCIAL DATA                    |               | ACCUM PCT<br>OF EST<br>FED COST | STATUS<br>(1 Jan 2000)   | PCT<br>CMPL | PHYSICAL<br>COMPLETION<br>SCHEDULE |
|----------------------------------------------|---------------|---------------------------------|--------------------------|-------------|------------------------------------|
| Estimated Federal Cost                       | \$ 14,400,000 |                                 | Relocations - Roads      | 1           | Being Determined                   |
|                                              |               |                                 | Cemeteries/Utilities     | 1           | Being Determined                   |
| Estimated Non-Federal Cost                   | 11,600,000    |                                 | Levees and Floodwalls    | 1           | Being Determined                   |
| Cash Contributions                           | \$ 1,559,000  |                                 | Recreation               | 1           | Being Determined                   |
| Other Costs                                  | 10,041,000    |                                 | Fish/Wildlife Facilities | 1           | Being Determined                   |
|                                              |               |                                 | Channels & Canals        | 1           | Being Determined                   |
| Total Estimated Project Costs                | 26,000,000    |                                 | Breakwaters              | 1           | Being Determined                   |
| Allocations to 30 September 2000             | 2,172,000     |                                 | Entire Project           | 5           | Being Determined                   |
| Conference Allowance for FY 2001             | 5,391,000     |                                 |                          |             |                                    |
| Allocation for FY 2001                       | 1,027,000     | /1                              |                          |             |                                    |
| Allocations through FY 2001                  | 3,199,000     | 22%                             |                          |             |                                    |
| Allocations Requested for FY 2002            | 500,000       | 26%                             |                          |             |                                    |
| Programmed Balance to Complete After FY 2002 | 10,701,000    |                                 |                          |             |                                    |

1/ Reflects \$864,000 reduction assigned as savings and slippage, \$3,500,000 reprogrammed from the project and \$11,000 rescinded in accordance with the Consolidated Appropriations Act, 2001..

| PHYSICAL DATA                       |              |
|-------------------------------------|--------------|
| Relocations - Bridges (Replacement) | 5            |
| Levee                               | 6,325 Meters |
| Floodwalls                          | 315 Meters   |
| Channels                            | 6,300 Meters |
| Jetty                               | 30.5 Meters  |
| Wetland Mitigation                  | 7.2 Acres    |
| Recreation Trails                   | 1,465 Meters |

Division: South Atlantic

District: Jacksonville

Arecibo River, PR

3 April 2001

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JUSTIFICATION: Over 500 acres of urbanized city area are impacted by floods including 800 residences, and over 100 businesses and public facilities. In addition to quantifiable damages, severe disruption of transportation and socio-economic activities resulted from these floods.

| Annual Benefits            | Amount         |
|----------------------------|----------------|
| Inundation Reduction       | \$ 6,609,000   |
| Employment                 | 80,000         |
| Advance Bridge Replacement | 161,000        |
| Flood Insurance Cost       | 9,000          |
| Recreation                 | <u>236,000</u> |
| Total                      | 7,095,000      |

FISCAL YEAR 2002: The requested amount will be applied as follows:

|                                 |               |
|---------------------------------|---------------|
| Channels and Canals             | \$ 88,000     |
| Levees and Floodwalls           | 367,000       |
| Engineering During Construction | 15,000        |
| Construction Management         | <u>30,000</u> |
| Total                           | 500,000       |

**NON-FEDERAL COST:** In accordance with the cost sharing and financing concepts reflected in the authorizing legislation, the non-Federal sponsor must comply with the requirements listed below for programmed work.

| Requirements of Local Cooperation                                                                                                                            | Payments During Construction, and Reimbursements | Annual Operation Maintenance, and Replacement Costs |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|-----------------------------------------------------|
| Provide lands, easements, rights of way, and dredged material disposal areas                                                                                 | \$ 4,954,000                                     |                                                     |
| Modify or relocate buildings, utilities, roads, bridges, (except railroad bridges), and other facilities, where necessary in the construction of the project | 5,087,000                                        |                                                     |
| Pay one-half of the separable costs allocated to recreation and bear all costs of operation, maintenance, and replacement of recreation facilities.          | 329,000                                          |                                                     |
| Pay 8.33 percent of the first costs allocated to flood control, and bear all cost of operation, maintenance, and replacement of flood control structures.    | <u>1,230,000</u>                                 |                                                     |
| <b>Total Non-Federal Costs</b>                                                                                                                               | <b>11,600,000</b>                                | <b>\$ 76,000</b>                                    |

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

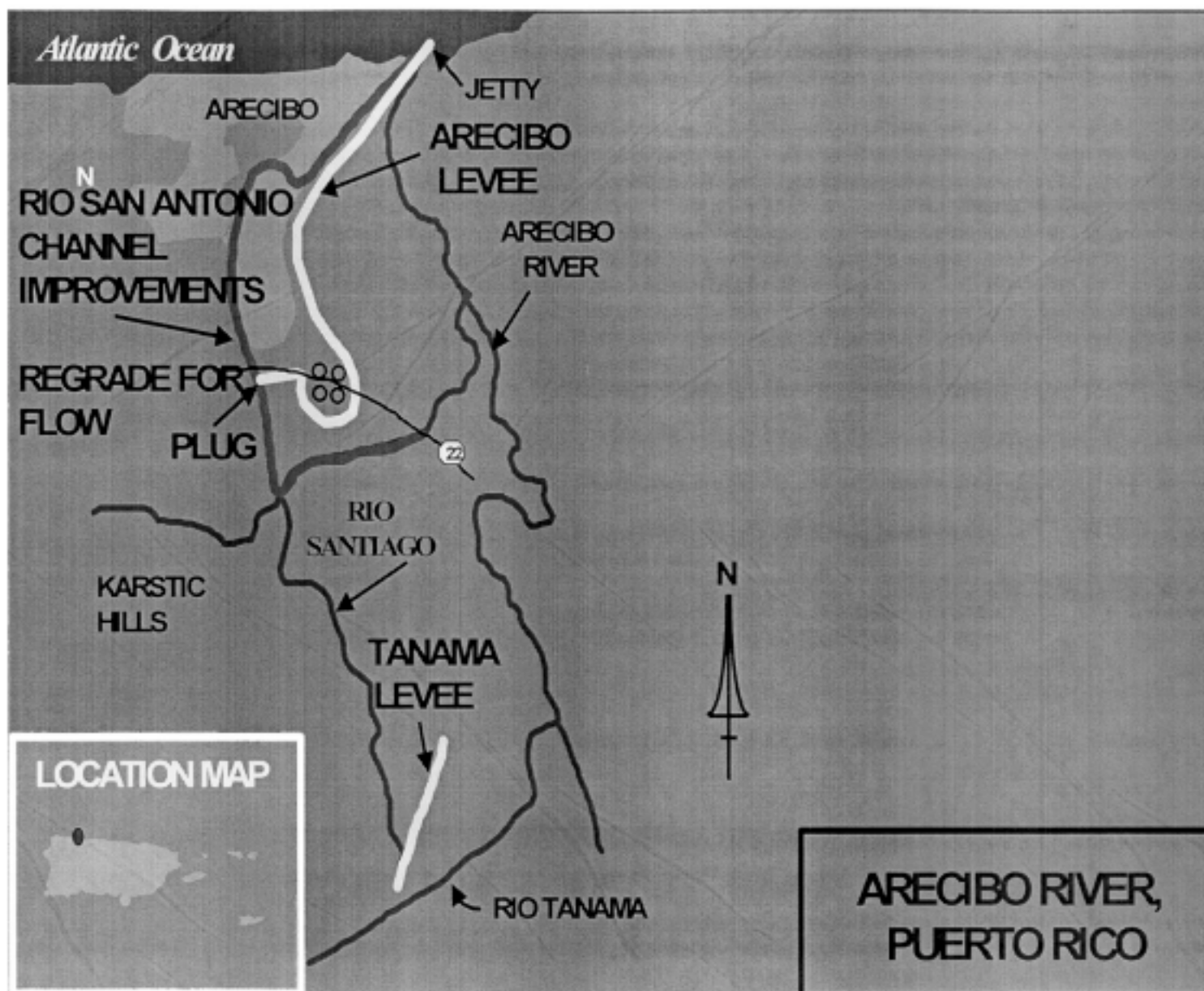
**STATUS OF LOCAL COOPERATION:** The Puerto Rico Department of Natural and Environmental Resources (DNER), is the local sponsor. The Project Cooperation Agreement is scheduled for execution in FY 2001.

**COMPARISON OF FEDERAL COST ESTIMATES:** The current Federal (Corps of Engineers) cost estimate of \$14,400,000 is an increase of \$1,900,000 over the latest estimate of \$12,500,000 submitted to Congress (FY 2001). This change includes the following:

| Item                                      | Amount             |
|-------------------------------------------|--------------------|
| Price Escalation on Construction Features | \$1,900,000        |
| <b>Total</b>                              | <b>\$1,900,000</b> |

**STATUS OF ENVIRONMENTAL IMPACT STATEMENT:** The final Environmental Impact Statement for the project was filed on 10 December 1993.

**OTHER INFORMATION:** Funds to initiate preconstruction engineering and design (PED), were appropriated in fiscal year 1994 and PED was complete in September 1999. This project is on the President's Long Term Recovery Action Plan for Puerto Rico.



APPROPRIATION TITLE: Construction, General - Local Protection Projects (Flood Control)

PROJECT: Portugues and Bucana Rivers, Puerto Rico (Continuing)

LOCATION: The improvements are in and near Ponce on the Portugues and Bucana Rivers on the south coast of Puerto Rico.

DESCRIPTION: The project provides for two multiple-purpose reservoirs for flood control, water supply, general recreation, and fish and wildlife enhancement; enlargement of 5.7 miles of Bucana River and 2 miles of Portugues River; a 1.3 mile diversion channel connecting the Portugues River to lower Bucana River; and debris basins at the Bucana and Portugues Rivers. All work is programmed except the water supply increment of Portugues Dam.

AUTHORIZATION: Flood Control Act of 1970 and Water Resources Development Act of 1986.

REMAINING BENEFIT - REMAINING COST RATIO: 1.6 to 1 at 5 5/8 percent.

TOTAL BENEFIT - COST RATIO: 1.6 to 1 at 5 5/8 percent.

INITIAL BENEFIT - COST RATIO: 1.6 to 1 at 5 5/8 percent (FY 1975).

BASIS OF BENEFIT - COST RATIO: Benefits are from the July 1973 Design Memorandum Phase 1, Plan Formulation and Site Selection Report at July 1973 prices levels except for Portugues Dam where benefits are from the March 1990 Economic Reanalysis Report at January 1990 price levels.

| SUMMARIZED FINANCIAL DATA                      |             |             | ACCUM<br>PCT OF EST<br>FED COST | STATUS<br>(1 Jan 2000)    | PCT<br>CMPL | PHYSICAL<br>COMPLETION<br>SCHEDULE |
|------------------------------------------------|-------------|-------------|---------------------------------|---------------------------|-------------|------------------------------------|
| Estimated Total Appropriation Requirement      |             | 430,300,000 |                                 | Channels and Canals       |             |                                    |
| Programmed Construction                        | 430,126,000 |             |                                 | Lower Channels            | 100         | Aug 1978                           |
| Unprogrammed Construction                      | 174,000     |             |                                 | Upper Bucana Channel      | 100         | Jun 1983                           |
|                                                |             |             |                                 | Upper Portugues Channel   | 95          | Dec 2000                           |
| Future Non-Federal Reimbursement               |             | 213,974,000 |                                 | Bucana River Debris Basin | 100         | Jun 1987                           |
| Programmed Construction                        | 213,974,000 |             |                                 | Portugues Debris Basin    | 100         | Mar 1987                           |
| Unprogrammed Construction                      | 0           |             |                                 | Dams                      |             |                                    |
|                                                |             |             |                                 | Cerrillos                 | 100         | Sep 1994                           |
| Estimated Federal Cost (Ultimate)              |             | 216,326,000 |                                 | Portugues (Flood Control) | 30          | Being determined                   |
| Programmed Construction                        | 216,152,000 |             |                                 | Portugues (Water Supply)  | 0           | Indefinite                         |
| Unprogrammed Construction                      | 174,000     |             |                                 | Recreation                |             |                                    |
|                                                |             |             |                                 | Channels                  | 60          | Being determined                   |
| Estimated Non-Federal Cost                     |             | 360,174,000 |                                 | Cerrillos                 | 42          | Mar 2002                           |
| Programmed Construction                        | 146,200,000 |             |                                 | Portugues                 | 0           | Being determined                   |
| Cash Contributions                             | 50,505,000  |             |                                 |                           |             |                                    |
| Other Costs                                    | 95,695,000  |             |                                 | Entire Project            | 85          | Being determined                   |
| Reimbursement                                  |             |             |                                 |                           |             |                                    |
| Water Supply                                   | 213,974,000 |             |                                 |                           |             |                                    |
| Unprogrammed Construction                      | 21,052,000  |             |                                 |                           |             |                                    |
| Cash Contributions                             | 21,052,000  |             |                                 |                           |             |                                    |
| Other Costs                                    | 0           |             |                                 |                           |             |                                    |
| Reimbursement                                  | 0           |             |                                 |                           |             |                                    |
| Total Estimated Programmed Construction Cost   |             | 576,500,000 |                                 |                           |             |                                    |
| Total Estimated Unprogrammed Construction Cost |             | 21,226,000  |                                 |                           |             |                                    |
| Total Estimated Project Cost                   |             | 531,192,000 |                                 |                           |             |                                    |

SUMMARIZED FINANCIAL DATA (Continued)

|                                                |             | ACCUM<br>PCT OF EST<br>FED COST |
|------------------------------------------------|-------------|---------------------------------|
| Allocations to 30 September 2000               | 388,979,000 |                                 |
| Conference Allowance for FY 2001               | 9,571,000   |                                 |
| Allocation for FY 2001                         | 6,537,000   | 1/                              |
| Allocation through FY 2001                     | 395,516,000 | 92%                             |
| Allocation Requested for FY 2002               | 5,409,000   | 93%                             |
| Programmed Balance to Complete After FY 2002   | 29,201,000  |                                 |
| Unprogrammed Balance to Complete After FY 2002 | 174,000     |                                 |

1/ Reflects \$1,534,000 reduction assigned as savings and slippage, \$1,500,000 reprogrammed from the project, and \$19,000 rescinded in accordance with the Consolidated Appropriation Act, 2001.

PHYSICAL DATA

| Dam<br>Type<br>Height<br>Crest Length                                     | Portugues<br>Concrete arch<br>272 feet<br>1,500 feet | Cerrillos<br>Earth and rock-fill<br>323 feet<br>1,555 feet |
|---------------------------------------------------------------------------|------------------------------------------------------|------------------------------------------------------------|
| Spillway Type                                                             | Ungated concrete ogee 150 feet wide                  | Ungated rock cut 400 feet wide                             |
| Reservoir Capacity (Acre-Feet)                                            |                                                      |                                                            |
| Flood Control                                                             | 8,342                                                | 17,065                                                     |
| Water Supply                                                              | 14,000                                               | 25,200                                                     |
| Sediment                                                                  | 2,841                                                | 5,635                                                      |
| Total                                                                     | 25,183                                               | 47,900                                                     |
| Portugues River Channel Enlargement                                       |                                                      | 2.1 miles                                                  |
| Bucana River Channel Enlargement                                          |                                                      | 5.7 miles                                                  |
| Diversion Channel Connecting Portugues<br>River to the Lower Bucana River |                                                      | 1.3 miles                                                  |

Division: South Atlantic

District: Jacksonville

Portugues and Bucana Rivers, PR

3 April 2001

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JUSTIFICATION: The mountainous terrain above Ponce permits rapid runoff into the rivers which overflow in the lower elevation flood plains in Ponce causing loss of life and extensive property damage. The 1954 flood caused damages of \$1,297,000 (\$6,991,000 at 1989 price levels). Minor flooding occurs almost yearly and major floods occur every 5 years on the average. Other major damaging floods occurred in 1961 (\$4,931,000 at 1989 price levels), 1970 (\$2,176,000 at 1989 price levels), 1975 (\$35,253,000 at 1989 price levels), and 1985 (\$33,517,000 at 1989 price levels). The average degree of protection provided by the completed project will be the standard project flood frequency. Upon completion, 6,415 acres will be protected, including 4,310 agricultural acres, 1,855 urban acres, and 250 acres which are undeveloped. Present value of property subject to flood damages is \$624,069,000. Average annual flood damages prevented are all attributable to existing urban development. Water supply is also a need that will be met by the Portugues and Bucana Rivers project. The water storage capacity in Lake Cerrillos is 25,200 acre-feet while ongoing studies have established a preliminary capacity for Lake Portugues of 14,000 acre-feet. Primary uses of the water supply will be municipal and industrial. Average annual benefits are as follows:

| Annual Benefits    | Amount           |
|--------------------|------------------|
| Flood Control      | 43,387,000       |
| Water Supply       | 13,968,000       |
| Recreation         | 2,418,000        |
| Area Redevelopment | <u>1,166,000</u> |
| Total              | 60,939,000       |

FISCAL YEAR 2002: The requested amount will be applied as follows:

|                         |                |
|-------------------------|----------------|
| Recreation              | 1,647,000      |
| Clearing-Portugues Dam  | 276,000        |
| Initiate Portugues Dam  | 3,061,000      |
| Construction Management | <u>425,000</u> |
| Total                   | 5,409,000      |

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Flood Control Act of 1970 and the Water Resources Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

| Requirements of Local Cooperation                                                                                                                                                                     | Payments During Construction and Reimbursements | Annual Operation, Maintenance, and Replacement Costs |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|------------------------------------------------------|
| Provide lands, easements, and rights-of-way.                                                                                                                                                          | 73,095,000                                      |                                                      |
| Modify or relocate buildings, utilities, roads, bridges, and other facilities, where necessary in the construction of the project.                                                                    | 20,818,000                                      |                                                      |
| Pay additional cash required to bring the total Non-Federal share of the flood control costs to 25 percent and bear all costs of operation, maintenance, and replacement of flood control facilities. | 50,505,000                                      | 249,900                                              |
| Pay one-half of the separable costs allocated to recreation and bear all costs of operation, maintenance, and replacement of recreation facilities.                                                   | 8,279,000                                       | 258,300                                              |
| Pay all costs allocated to municipal and industrial water supply and bear all costs of operation, maintenance, and replacement of municipal and industrial water supply facilities.                   | 20,667,000                                      | 85,700                                               |
| Reimbursement for water supply on Cerrillos Dam                                                                                                                                                       | <u>66,360,000</u>                               | <u>          </u>                                    |
| Total Non-Federal Costs                                                                                                                                                                               | 239,724,000                                     | 593,900                                              |

STATUS OF LOCAL COOPERATION: The Commonwealth of Puerto Rico Department of Natural and Environmental Resources is the local sponsor. The following contract agreements are required pursuant to Section 221 of the River and Harbor and Flood Control Act of 1970 and the Water Resources Development Act of 1986:

| Contract                                            | Actual or Anticipated Execution Date |
|-----------------------------------------------------|--------------------------------------|
| Section 221 – Cerrillos Reservoir                   | 15 Mar 1982                          |
| Channels                                            | 22 Jul 1974                          |
| Water Supply – Cerrillos Reservoir                  | 15 Mar 1982                          |
| Recreation – Cerrillos Reservoir                    | 15 Mar 1982                          |
| Channels                                            | 24 Jun 1987                          |
| Project Cooperation Agreement – Portugues Reservoir | 9 Aug 1993                           |

Division: South Atlantic

District: Jacksonville

Portugues and Bucana Rivers, PR

3 April 2001

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STATUS OF LOCAL COOPERATION (Continued):

Portugues Dam is a concrete elliptical arch dam, curved in both the vertical and horizontal planes. The dam is designed as a multi-purpose dam to be constructed in two phases. The Commonwealth of Puerto Rico has requested that the dam be constructed as soon as possible for flood control and recreation, but to defer the water supply feature to a later date. By letter dated 15 November 1991, the Commonwealth restated their commitment to the full and complete multi-purpose Portugues Dam, and agreed to pay the additional costs required for the phased construction.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps) cost estimate of \$430,300,000 is the same as the latest estimate presented to Congress (FY 2001).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final EIS was filed with CEQ on 25 February 1974. A Supplemental EIS for the Portugues Dam was submitted in November 1992.

OTHER INFORMATION: Funds to initiate preconstruction planning were appropriated in Fiscal Year 1972. Funds to initiate construction were appropriated in Fiscal Year 1975.

SUMMARIZED FINANCIAL DATA FOR PROGRAMMED SEPARABLE ELEMENTS:

Channels and Canals

|                              |            |             |
|------------------------------|------------|-------------|
| Estimated Federal Cost       |            | 110,988,000 |
| Estimated Non-Federal Costs  |            | 62,387,000  |
| Cash Contributions           | 3,377,000  |             |
| Other Costs                  | 59,010,000 |             |
| Total Estimated Project Cost |            | 173,375,000 |

REMAINING BENEFIT-COST RATION: Not applicable because construction is substantially complete.

SUMMARIZED FINANCIAL DATA FOR PROGRAMMED SEPARABLE ELEMENTS (Continued):

Cerrillos Dam

|                                                 |             |
|-------------------------------------------------|-------------|
| Estimated Total Appropriation Requirement       | 224,862,000 |
| Future Non-Federal Reimbursement (Water Supply) | 213,974,000 |
| Estimated Federal Cost Ultimate                 | 10,888,000  |
| Estimated Non-Federal Cost Ultimate             | 243,337,000 |
| Cash Contributions                              | 5,483,000   |
| Other Costs                                     | 23,880,000  |
| Reimbursement:                                  | 213,974,000 |
| Water Supply                                    |             |
| Total Estimated Project Cost                    | 254,225,000 |

REMAINING BENEFIT-REMAINING COST RATION: Not applicable because construction is substantially complete.

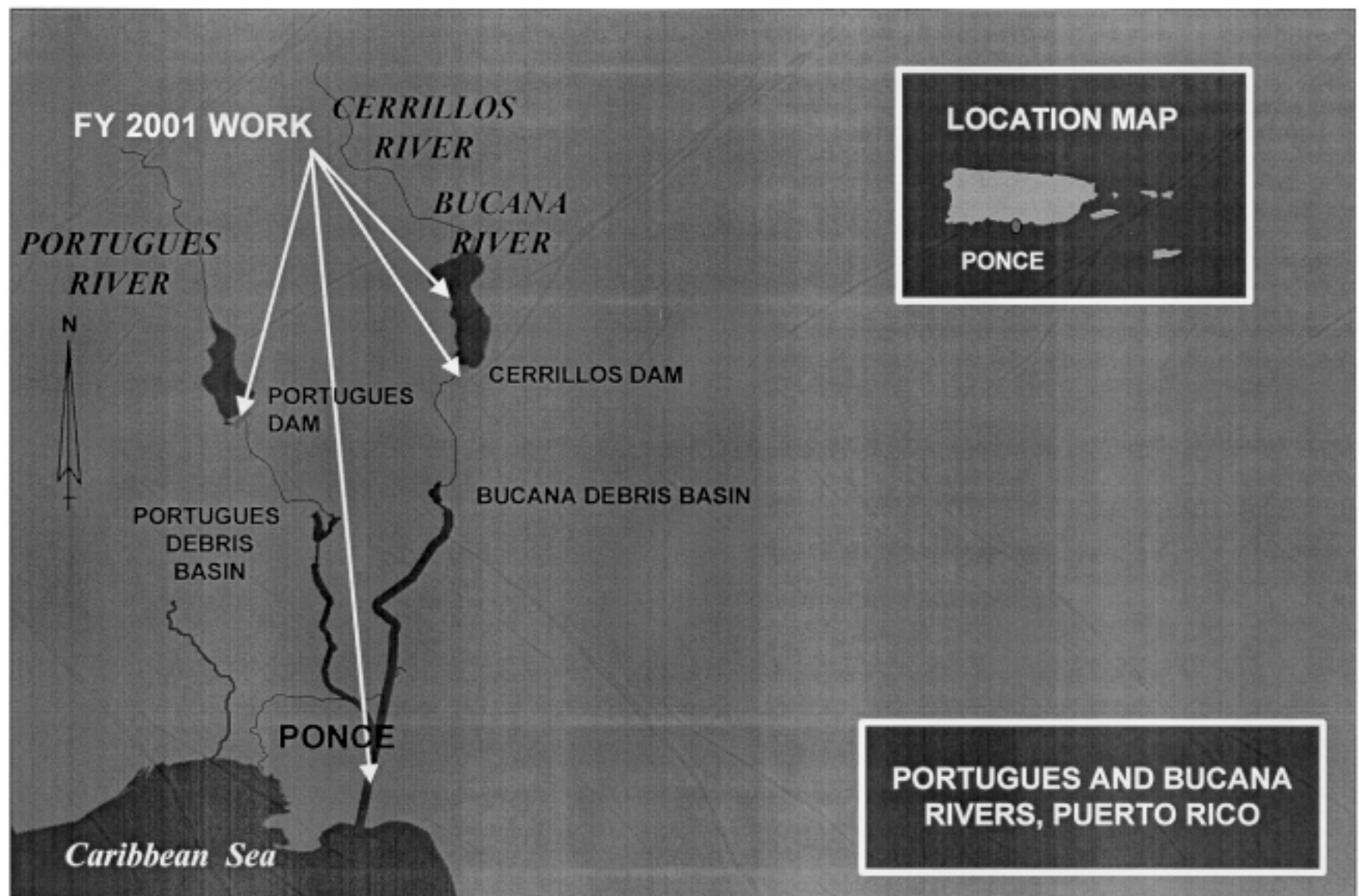
SUMMARIZED FINANCIAL DATA FOR PROGRAMMED SEPARABLE ELEMENTS (Continued):

Portugues Dam

|                                                |            |            |             |
|------------------------------------------------|------------|------------|-------------|
| Estimated Total Appropriation Requirement      |            |            | 94,450,000  |
| Programmed Construction                        |            | 94,276,000 |             |
| Unprogrammed Construction                      |            | 174,000    |             |
| Estimated Non-Federal Cost                     |            |            | 54,550,000  |
| Programmed Construction                        |            | 33,498,000 |             |
| Cash Contribution                              | 20,693,000 |            |             |
| Other Costs                                    | 12,805,000 |            |             |
| Unprogrammed Construction                      |            | 21,052,000 |             |
| Cash Contributions                             | 21,052,000 |            |             |
| Other Costs                                    | 0          |            |             |
| Total Estimated Programmed Construction Cost   |            |            | 127,774,000 |
| Total Estimated Unprogrammed Construction Cost |            |            | 21,226,000  |
| Total Estimated Project Cost                   |            |            | 149,000,000 |

REMAINING BENEFIT-REMAINING COST RATION: 6.8 to 1 at 6 5/8 percent.

TOTAL BENEFIT-COST RATIO: 4.1 to 1 at 6 5/8 percent.



APPROPRIATION TITLE: Construction, General - Local Protection Projects (Flood Control)

PROJECT: Rio de la Plata, Puerto Rico (Continuing)

LOCATION: The Rio de La Plata basin drains an area of approximately 240 square miles at a point 11 miles west of San Juan. This area includes all or part of the municipalities of Dorado, Toa Baja, Toa Alta, Camerio, Cedra, Cayey, Arbonito and Barranquitas. The total population of the basin is approximately 290,000 people.

DESCRIPTION: The proposed plan calls for 7.0 miles of channel excavation and improvements, 7.6 miles of levees along both sides of the river, 8 ponding areas, wetland mitigation, recreation facilities, and the replacement of 3 bridges. The project is designed to provide 100-year flood protection for the areas south of Highway 2 and the area surrounding El Polvorin Ward and SPF protection for the remainder of the area north of Highway 2. All work is programmed. Hurricane Georges caused an estimated \$21,500,000 in damages in a 24-year event.

AUTHORIZATION: Water Resources Development Act of 1990, Sec 101(a)(19).

REMAINING BENEFIT - REMAINING COST RATIO: 1.6 to 1 at 8 4/8 percent.

TOTAL BENEFIT - COST RATIO: 1.6 to 1 at 8 4/8 percent.

INITIAL BENEFIT - COST RATIO: 1.6 to 1 at 8 4/8 percent (FY 1995).

BASIS OF BENEFIT - COST RATIO: Benefits are from the economic analyses performed for the April 1992 Limited Reevaluation Report (LRR), revised in June 1992 at October 2000 price levels.

| SUMMARIZED FINANCIAL DATA                      |               | ACCUM<br>PCT OF<br>EST FED<br>COST | STATUS<br>(1 Jun 2000)                       | PCT<br>CMPL | PHYSICAL<br>COMPLETION<br>SCHEDULE |
|------------------------------------------------|---------------|------------------------------------|----------------------------------------------|-------------|------------------------------------|
| Estimated Federal Cost                         | \$ 66,700,000 |                                    | Relocations - Bridges                        | 0           | Being Determined                   |
| Estimated Non-Federal Cost                     | 32,300,000    |                                    | Channels and Canals                          | 0           | Being Determined                   |
| Cash Contributions                             | \$ 5,352,000  |                                    | Levees and Floodwalls                        | 0           | Being Determined                   |
| Other Costs                                    | 26,948,000    |                                    | Recreation                                   | 0           | Being Determined                   |
|                                                |               |                                    | Floodway Control and<br>Diversion Structures | 0           | Being Determined                   |
| Total Estimated Project Cost                   | 99,000,000    |                                    | Entire Project                               | 7           | Being Determined                   |
| Allocations to 30 September 2000               | \$ 6,913,000  |                                    |                                              |             |                                    |
| Conference Allowance for FY 2001               | 3,486,000     |                                    |                                              |             |                                    |
| Allocation for FY 2001                         | 427,000       | 1/                                 |                                              |             |                                    |
| Allocations through FY 2001                    | 7,340,000     | 11%                                |                                              |             |                                    |
| Allocation Requested for FY 2002               | 500,000       | 12%                                |                                              |             |                                    |
| Programmed Balance to Complete After FY 2002   | 59,346,000    |                                    |                                              |             |                                    |
| Unprogrammed Balance to Complete After FY 2002 | 0             |                                    |                                              |             |                                    |

1/ Reflects reduction of \$559,000 assigned as savings and slippage, \$2,500,000 reprogrammed from the project. and \$7,000 rescinded in accordance with the Consolidated Appropriation Act, 2001.

| PHYSICAL DATA                       |      |
|-------------------------------------|------|
| Relocations - Bridges (Replacement) | 3    |
| Levees - Miles                      | 7.6  |
| Canals - Miles                      | 7    |
| Ponding Areas                       | 8    |
| Wetlands Mitigation * - Acres       | 5.25 |
| Recreation Areas                    | 3    |

\* An additional 10 acres of shallow lagoon and emergent marsh will also be created adjacent to the mitigation area.



JUSTIFICATION: Heavy rainfall combined with the very steep slopes of the upper basin produces high discharges in a relatively short time. Flooding in the area affects over 12,300 families and numerous public buildings and commercial facilities. The area has been declared a flood disaster area by the President six times since 1974. The most recent flood occurred in January 1992 which damaged numerous commercial structures, public facilities and about 3,000 homes and resulted in the loss of two lives. The average annual rainfall is about 71 inches. Average annual benefits are as follows:

| Annual Benefits                | Amount         |
|--------------------------------|----------------|
| Inundation Reduction           | \$ 9,230,000   |
| Benefits During Construction   | 937,000        |
| Redevelopment                  | 429,000        |
| Advance Bridge Replacement     | 608,000        |
| Recreation                     | 117,000        |
| Other: Emergency and Insurance | <u>162,000</u> |
| Total                          | 11,483,000     |

FISCAL YEAR 2002: The requested amount will be applied as follows:

|                                   |                   |
|-----------------------------------|-------------------|
| Planning, Engineering, and Design | <u>\$ 500,000</u> |
| Total                             | 500,000           |

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the authorizing legislation, the non-Federal sponsor must comply with the requirements listed below.

| Requirements of Local Cooperation                                                                                                                            | Payments During Construction and Reimbursements | Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|------------------------------------------------------------------------------|
| Provide lands, easements, and rights-of-way and dredged material disposal areas.                                                                             | \$ 9,333,000                                    |                                                                              |
| Modify or relocate buildings, utilities, roads, bridges, (except railroad bridges), and other facilities, where necessary in the construction of the project | 17,615,000                                      |                                                                              |
| Pay one-half of the separable costs allocated to recreation and bear all costs of operation, maintenance, and replacement of recreation facilities           | 505,000                                         |                                                                              |
| Pay 6.9 percent of the first costs allocated to flood control, and bear all cost of operation, maintenance, and replacement of flood control structures      | <u>4,847,000</u>                                | <u>                    </u>                                                  |
| Total Non-Federal Costs                                                                                                                                      | 32,300,000                                      | \$ 367,000                                                                   |

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

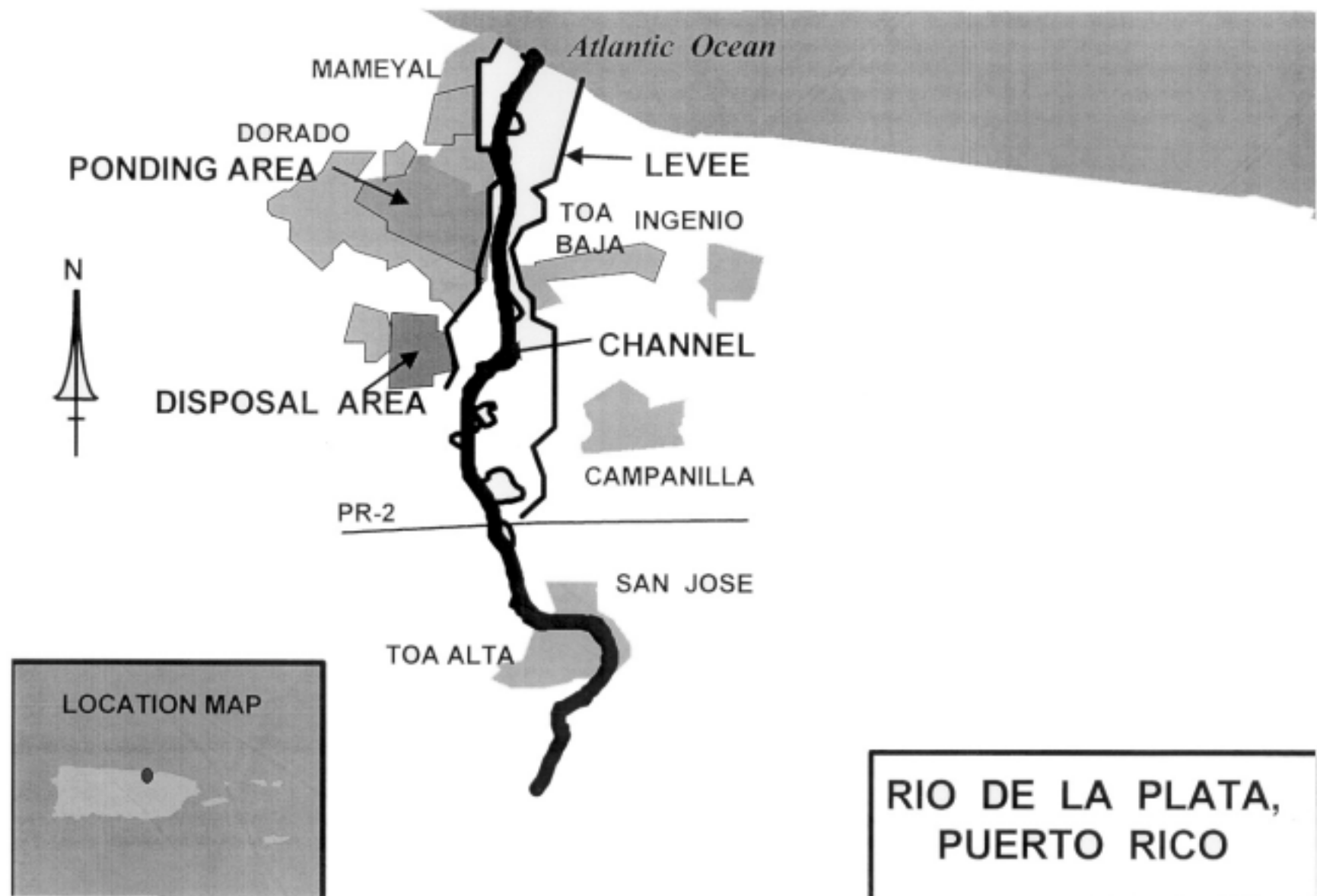
STATUS OF LOCAL COOPERATION: The Commonwealth of Puerto Rico Department of Natural and Environmental Resources is the local sponsor. Acquisition for real estate required for the first contract is underway.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps of Engineers) cost estimate of \$66,700,000 is an increase of \$1,800,000 from the latest estimate (\$64,900,000) submitted to Congress (FY 2001). This change includes the following:

| Item                                      | Amount      |
|-------------------------------------------|-------------|
| Price Escalation on Construction Features | \$1,800,000 |
| Total                                     | \$1,800,000 |

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement for the project was filed in September 1988. The FONSI was signed in April 1993.

OTHER INFORMATION: Funds to initiate planning, engineering, and design were appropriated in Fiscal Year 1990, and funds to initiate construction were appropriated in October 1994. The current scheduled completion date is being determined. This project is on the President's Long Term Recovery Action Plan for Puerto Rico.



APPROPRIATION TITLE: Construction, General - Local Protection Projects (Flood Control)

PROJECT: Rio Grande de Loiza, Puerto Rico (Continuing)

LOCATION: The Rio Grande de Loiza basin, located in the eastern central part of Puerto Rico, is the island's largest basin. It comprises the coastal plain of Carolina and the metropolitan area of Caguas in the interior valley. The project area consists of 530 square kilometers draining into Lake Loiza. It includes the city of Caguas and the town of Gurabo where over 4,100 families and numerous public buildings and commercial facilities are affected by flooding.

DESCRIPTION: The authorized project would provide channels, levees, and floodwalls for flood protection for the highly urbanized areas of the city of Caguas and the town of Gurabo. It consists of 1.8 kilometers of gabion-lined channel, 1.9 kilometers of concrete channels, and a debris basin for Rio Caguaitas; 1.3 kilometers of concrete channels, 1.0 kilometers of earth channel, 0.6 kilometers of gabion-lined channel, 1.0 kilometer of levees, and a debris basin for Rio Bairoa; 2.8 kilometers of levees and floodwalls for Rio Grande de Loiza; and 0.7 kilometers of pilot channel and 1.8 kilometers of levees for Rio Gurabo. It also provides for recreation bikeway/pedestrian trails at Rio Grande de Loiza and Rio Gurabo levees. The average level of protection at Rio Caguaitas and Rio Bairoa is estimated at 70 years and 220 years, respectively. The average level of protection for the remaining reaches is estimated at 100 years.

AUTHORIZATION: Water Resources Development Act of 1992, Section 101 (19).

REMAINING BENEFIT - REMAINING COST RATIO: 1.9 to 1 at 6-7/8 percent.

TOTAL BENEFIT - COST RATIO: 1.9 to 1 at 6-7/8 percent.

BASIS OF BENEFIT - COST RATIO: Benefits are from the Economic Analyses performed for the April 1995 Limited Reevaluation Report, updated at October 2000 price levels.

| SUMMARIZED FINANCIAL DATA                         |              | ACCUM<br>PCT OF<br>EST<br>FED COST | STATUS<br>(1 Jan 2000)         | PCT<br>CMPL | PHYSICAL<br>COMPLETION<br>SCHEDULE |
|---------------------------------------------------|--------------|------------------------------------|--------------------------------|-------------|------------------------------------|
| Estimated Federal Cost                            |              | \$155,300,000                      | Channels and Canals            | 1           | Being Determined                   |
| Estimated Non-Federal Cost                        |              | 55,300,000                         | Levees and Floodwalls          | 1           | Being Determined                   |
| Cash Contributions                                | \$10,981,000 |                                    | Floodway Control and Diversion | 1           | Being Determined                   |
| Other Costs                                       | 44,319,000   |                                    | Recreation                     | 1           | Being Determined                   |
| Total Estimated Project Cost                      |              | 210,600,000                        | Entire Project                 | 4           | Being Determined                   |
| Allocations to 30 September 2000                  |              | 2,713,000                          |                                |             |                                    |
| Conference Allowance for FY 2001                  |              | 749,000                            |                                |             |                                    |
| Allocation for FY 2001                            |              | 629,000                            | 1/                             |             |                                    |
| Allocations through FY 2001                       |              | 3,342,000                          | 2%                             |             |                                    |
| Allocation Requested for FY 2002                  |              | 500,000                            | 2%                             |             |                                    |
| Programmed Balance To Complete<br>After FY 2002   |              | 151,458,000                        |                                |             |                                    |
| Unprogrammed Balance to Complete<br>After FY 2001 |              | 0                                  |                                |             |                                    |

1/Reflects \$120,000 reduction assigned as savings and slippage and \$1,000 rescinded in accordance with the Consolidated Appropriation Act, 2001.

| PHYSICAL DATA                       |     |
|-------------------------------------|-----|
| Relocations - Bridges (Replacement) | 12  |
| Levees & Floodwalls - Kilometers    | 5.6 |
| Channels - Kilometers               | 7.3 |
| Debris Basins                       | 2   |

JUSTIFICATION: Flooding is a major problem in this area threatening the life, property and economic development of the residents of the city of Caguas and the town of Gurabo, Puerto Rico. The Upper Rio Grande de Loiza basin drains an area of 530 square kilometers into the Loiza Lake. Heavy rainfall combines with very steep slopes to produce high discharges in a relatively short period of time. Flooding in the detailed study area affects over 4,100 families, and numerous public building and commercial facilities. Expected annual flood damages for existing conditions is estimated at \$18.6 million.

Average annual benefits are as follows:

| Annual Benefits            | Amount         |
|----------------------------|----------------|
| Inundation Reduction       | \$ 21,247,000  |
| Location                   | 1,060,000      |
| Redevelopment              | 909,000        |
| Advance Bridge Replacement | 273,000        |
| Flood Insurance Cost       | 150,000        |
| Recreation                 | <u>210,000</u> |
| Total                      | 23,849,000     |

FISCAL YEAR 2002: The requested amount will be applied as follows:

|                                   |                   |
|-----------------------------------|-------------------|
| Planning, Engineering, and Design | <u>\$ 500,000</u> |
| Total                             | 500,000           |

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Flood Control Act of 1970 and the Water Resources Act of 1986, the non-Federal sponsor must comply with the requirements listed below.

|                                                                                                                                                                                                                                | Payments During<br>Construction and<br>Reimbursements | Annual Operation,<br>Maintenance, Repair,<br>Rehabilitation, and<br>Replacement Costs |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|---------------------------------------------------------------------------------------|
| Requirements of Local Cooperation                                                                                                                                                                                              |                                                       |                                                                                       |
| Provide lands, easements, and rights-of-way.                                                                                                                                                                                   | \$ 22,229,000                                         |                                                                                       |
| Modify or relocate buildings, utilities, roads, bridges, and other facilities, where necessary in the construction of the project.                                                                                             | 22,090,000                                            |                                                                                       |
| Pay 7.02 percent of the costs allocated to flood control to bring the total non-Federal share of flood control costs to 25 percent and bear all costs of operations, maintenance, and replacement of flood control facilities. | 10,493,000                                            |                                                                                       |
| Pay one-half of the separable costs allocated to recreation and bear all costs of operation, maintenance, and replacement of recreation facilities.                                                                            | <u>488,000</u>                                        |                                                                                       |
| Total Non-Federal Cost                                                                                                                                                                                                         | 55,300,000                                            | \$ 80,000                                                                             |

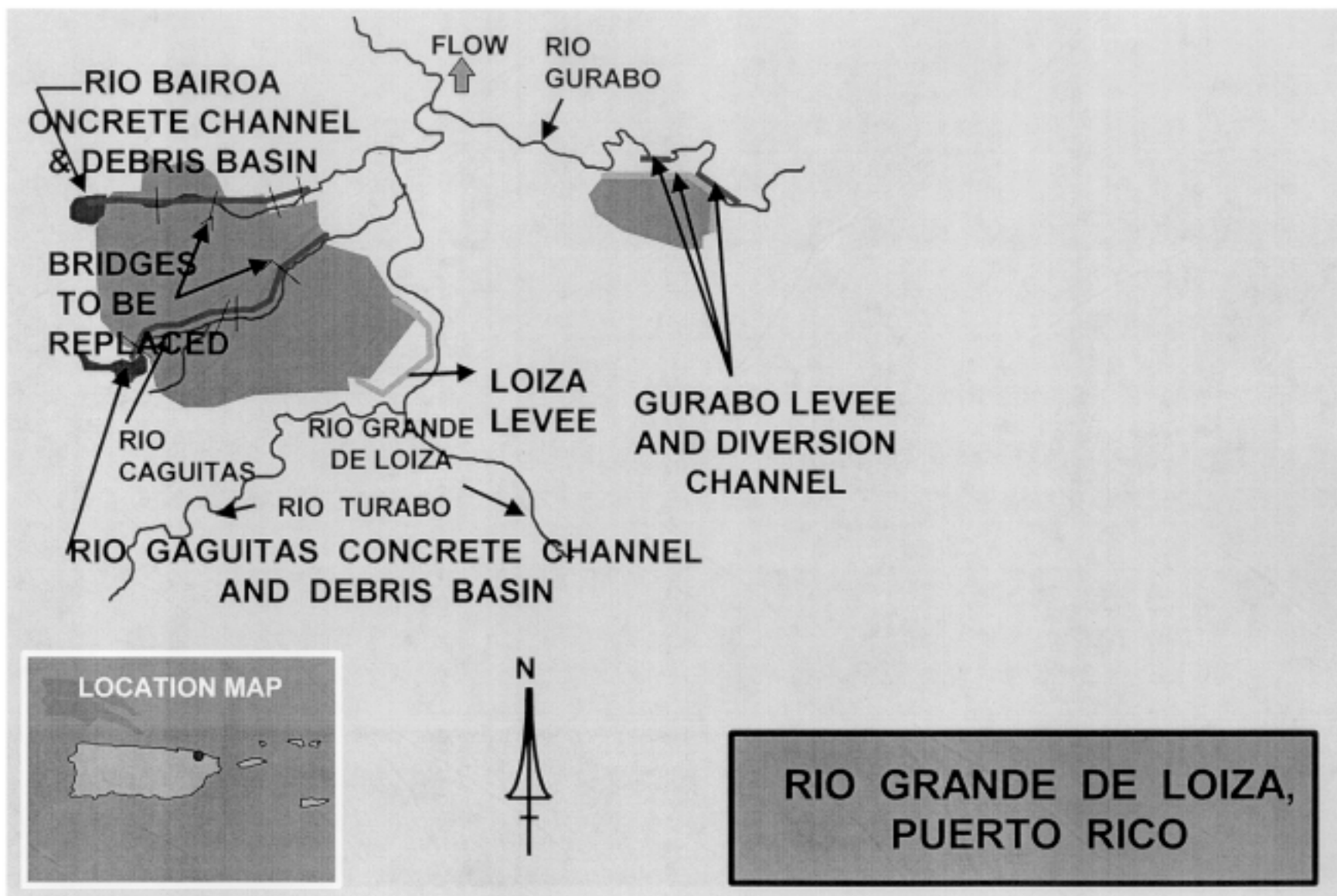
STATUS OF LOCAL COOPERATION: The Commonwealth of Puerto Rico Department of Natural and Environmental Resources is the local sponsor. The Project Cooperation Agreement (PCA) for the project is scheduled for execution in April 2001.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps) cost estimate of \$155,000,000 is an increase of \$4,300,000 from the latest estimate (\$150,700,000) submitted to Congress (FY2001). This change includes the following:

| Item                                      | Amount      |
|-------------------------------------------|-------------|
| Price Escalation on Construction Features | \$4,300,000 |
| Total                                     | \$4,300,000 |

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final EIS was filed in October 1991. No significant fish and wildlife habitats were identified, no specific mitigation measures were recommended as part of the flood control plan. A Water Quality Certificate (WQC) covering the entire project was issued by the Puerto Rico Environmental Quality Board on March 15, 1993

OTHER INFORMATION: Funds to initiate preconstruction, engineering and design were appropriated in Oct 1992. Funds were appropriated to initiate construction in FY 2001.





APPROPRIATION TITLE: Construction, General -- Local Protection Project (Flood Control)

PROJECT: Rio Grande de Manati, Puerto Rico (Continuing)

LOCATION: The project area consists of the Rio Grande de Manati basin, which is located in the north-central coastal region of Puerto Rico at the town of Barceloneta.

DESCRIPTION: The recommended plan consists of providing a 5,300 meters long ring levee, two pilot channels totaling 1,620 meters in length, and minimum interior drainage facilities. Project implementation requires acquisition of seven residential structures, relocation of one boat ramp, three highway ramps, and one agricultural road ramp, and relocation of existing utilities impacted by the levee at four locations. The project is designed to protect against the 100-year flood and would reduce 92 percent of the total annual flood damages for the flood prone areas of the town of Barceloneta. The recommended plan maximizes the net national economic development benefits.

AUTHORIZATION: Water Resource Development Act (WRDA) 1999

REMAINING BENEFIT - REMAINING COST RATIO. 4.2 to 1 at 6 5/8 percent

TOTAL BENEFIT -- COST RATIO: 4.2 to 1 at 6 5/8 percent

BASIS OF BENEFIT - COST RATIO: Benefits are from the economic analyses performed for the May 1998 Supplemental Report to the March 1994 Final Detailed Project Report and Environmental Assessment, updated at October 2000 price levels.

| SUMMARIZED FINANCIAL DATA                      |           | ACCUM<br>PCT OF EST<br>FED COST | STATUS<br>(1 Jan 2001) | PERCENT<br>COMPLETE | PHYSICAL<br>COMPLETION<br>SCHEDULE |
|------------------------------------------------|-----------|---------------------------------|------------------------|---------------------|------------------------------------|
| Estimated Federal Cost                         |           | 10,400,000                      | Relocations - Roads    |                     |                                    |
|                                                |           |                                 | Channels               | 3                   | Being Determined                   |
| Estimated Non-Federal Cost                     |           | 5,600,000                       | Levees                 | 2                   | Being Determined                   |
| Cash Contributions                             | 2,110,000 |                                 |                        |                     |                                    |
| Other Costs                                    | 3,490,000 |                                 | Entire Project         | 5                   | Being Determined                   |
| Total Estimated Project Cost                   |           | 16,000,000                      |                        |                     |                                    |
| Allocations to 30 September 2000               |           | 1,029,000                       |                        |                     |                                    |
| Conference Allowance for FY 2001               |           | 0                               |                        |                     |                                    |
| Allocation for FY 2001                         |           | 3,000,000                       | 1/                     |                     |                                    |
| Allocations through FY 2001                    |           | 4,029,000                       | 29%                    |                     |                                    |
| Allocation Requested for 2002                  |           | 1,500,000                       | 68%                    |                     |                                    |
| Programmed Balance to Complete after FY 2002   |           | 4,871,000                       |                        |                     |                                    |
| Unprogrammed Balance to Complete after FY 2002 |           | 0                               |                        |                     |                                    |

1/ Reflects \$3,000,000 reprogrammed to the project.

#### PHYSICAL DATA

|                     |       |        |
|---------------------|-------|--------|
| Levee               | 5,300 | Meters |
| Pilot Channels      | 1,620 | Meters |
| Drainage Channels   | 5,230 | Meters |
| Drainage Structures | 2     |        |
| Road Ramps          | 4     |        |

JUSTIFICATION: The overflow of the Rio Grande de Manati results in severe and frequent flooding to the entire town of Barceloneta (population of 5,000 people) and affects over 300 acres of highly urbanized area with 914 residential structures, 91 commercial structures, 51 institutional facilities, and 14 industrial buildings. Since the turn of the century, there have been at least fifteen damaging floods on the Rio Grande de Manati. Flood waters from the floods of May 1985 and those resulting from the passage of Georges caused damages totaling over \$10.0 million and President declared the town of Barceloneta a disaster area. This project has been identified as the number one priority in the President's Long-Term Recovery Action Plan for flood damage prevention in the Commonwealth of Puerto Rico.

| Item                  | Amount        |
|-----------------------|---------------|
| Inundation reduction  | 4,199,000     |
| Redevelopment         | 0             |
| Recreation            | 0             |
| Others                | <u>44,000</u> |
| Total Annual Benefits | 4,243,000     |

FISCAL YEAR 2002: The requested amount will be applied as follows:

|                                 |                |
|---------------------------------|----------------|
| Channels                        | 0              |
| Levees                          | 1,292,000      |
| Engineering During Construction | 50,000         |
| Supervision and Administration  | <u>158,000</u> |
| Total                           | 1,500,000      |

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Chief of Engineers Report dated 22 January 1999 and WRDA 1999, the non-Federal sponsor must comply with the requirements listed below for programmed work.

| Requirements of Local Cooperation                                                                                                                            | Payments During Construction, and Reimbursements | Annual Operation, Maintenance, and Replacement Costs |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|------------------------------------------------------|
| Provide lands, easements, rights of way, and dredged material disposal areas.                                                                                | 1,837,000                                        |                                                      |
| Modify or relocate buildings, utilities, roads, bridges (except railroad bridges), and other facilities, where necessary in the construction of the project. | 1,653,000                                        |                                                      |
| Pay 16.9 percent of the first costs allocated to flood control, and bear all cost of operation, maintenance, and replacement of flood control structures.    | <u>2,110,000</u>                                 | <u>20,000</u>                                        |
| Total non-Federal payments during construction                                                                                                               | 5,600,000                                        | 20,000                                               |

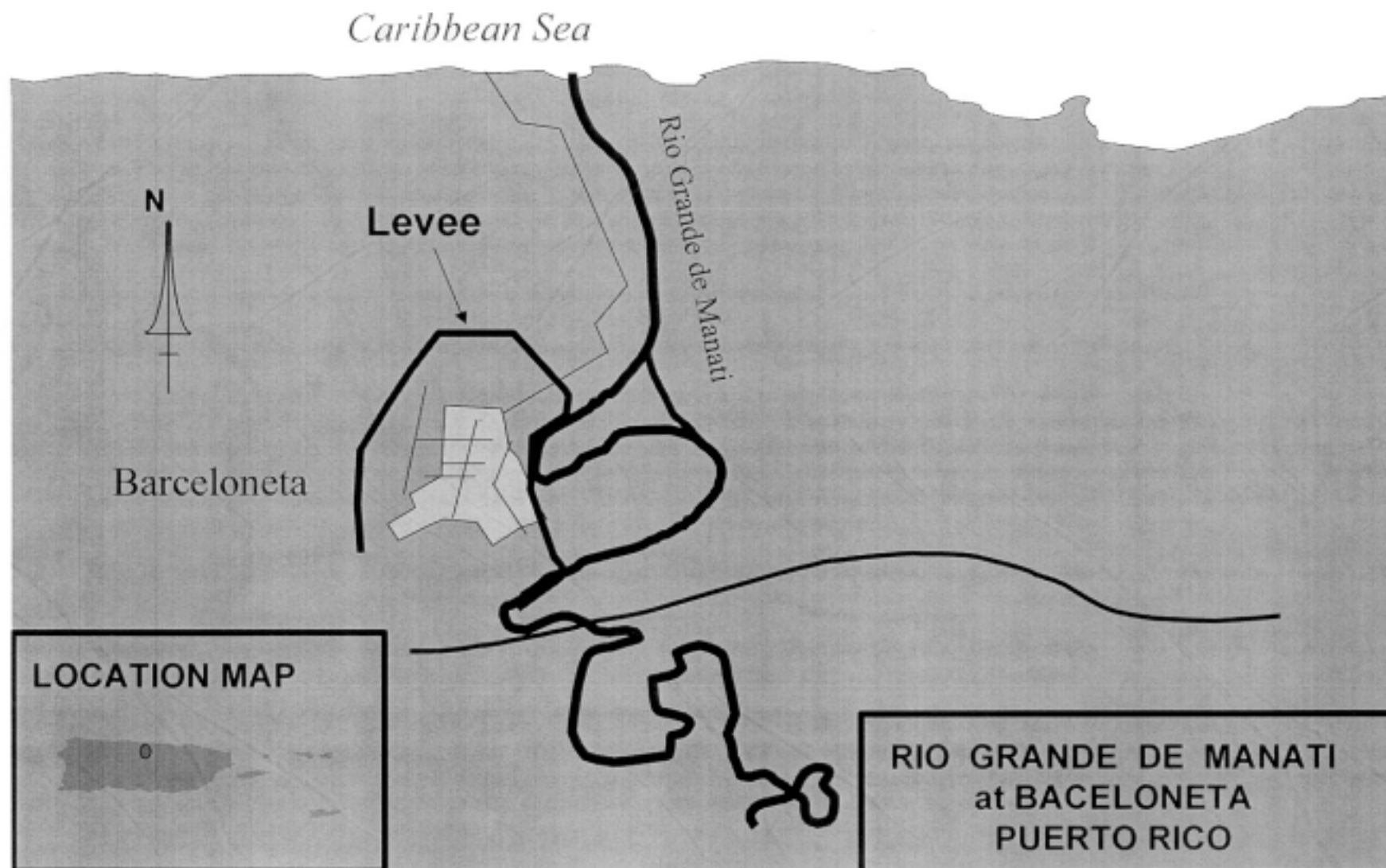
The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: Commonwealth of Puerto Rico Department of Natural and Environmental Resources (DNER) is the local sponsor. The Project Cooperation Agreement was executed under Section 205 of the Continuing Authorities Program on 10 May 1999. This project was initially pursued under the Continuing Authorities Program (CAP), but as the cost of the project substantially exceeds the CAP scope, specific authorization was sought and subsequently included in WRDA 1999. This authorization adjusted the project cost sharing by removing the \$5 million Federal cost limitation under CAP and require the sponsor to provide a minimum of 35 percent, but not to exceed 50 percent. A supplement to the PCA would be required to amend the project cost sharing. The supplement to the PCA is scheduled for October 2001 should construction funds be appropriated.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps of Engineers) cost estimate is \$10,400,000. This is the initial budget submission to Congress.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The Finding of No Significant Impact (FONSI) was signed on 24 March 1994 and Water Quality Certification was issued on 15 August 1995.

OTHER INFORMATION. Funds to initiate plans and specifications were allocated in fiscal year 1995 under the Continuing Authority Program. Due to the relatively high non-federal cost sharing under the Continuing Authority Program, the Puerto Rico Resident Commissioner has pursued a direct Congressional Authorization. The execution of the PCA under Section 205 of the Continuing Authorities Program was based upon the need to expedite implementation of this project. Land acquisition by the local sponsor is currently underway.



APPROPRIATION TITLE: Construction, General - Local Protection Project (Flood Control)

PROJECT: Rio Puerto Nuevo, Puerto Rico (Continuing)

LOCATION: The Rio Puerto Nuevo drainage basin is located within the San Juan Metropolitan Area along the northern coast of Puerto Rico. The basin joins the southeast side of San Juan Harbor and extends south and up into the foothills of the central mountains of Puerto Rico. The basin is traversed by the Rio Piedras, Rio Puerto Nuevo, Quebrada Margarita, Quebrada Josefina, Quebrada Dona Ana, Quebrada Buena Vista, and Quebrada Guaracanal.

DESCRIPTION: The proposed plan calls for improvements to 11.2 miles of the existing channels of Rio Puerto Nuevo and Rio Piedras and five tributaries of the Rio Puerto Nuevo drainage basin. The project is designed to provide 100-year flood protection for the areas adjacent to the Puerto Nuevo and its tributaries. All work is programmed.

AUTHORIZATION: Water Resources Development Act of 1986.

REMAINING BENEFIT - REMAINING COST RATIO: 2.5 to 1 at 8 1/2 percent.

TOTAL BENEFIT - COST RATIO: 2.5 to 1 at 8 1/2 percent.

INITIAL BENEFIT - COST RATIO: 2.5 to 1 at 8 1/2 percent.

BASIS OF BENEFIT - COST RATIO: Benefits are from the economic analyses performed for the revised General Design Memorandum dated June 1991 at October 2000 price levels.

| SUMMARIZED FINANCIAL DATA                      |            | ACCUM<br>PCT OF<br>EST<br>FED<br>COST | STATUS<br>(1 Jan 2001)    | PERCENT<br>COMPLETE | PHYSICAL<br>COMPLETION<br>SCHEDULE |
|------------------------------------------------|------------|---------------------------------------|---------------------------|---------------------|------------------------------------|
| Estimated Federal Cost                         |            | 331,000,000                           | Relocations               | 30                  | Being Determined                   |
|                                                |            |                                       | Roads, Railroads, Bridges | 30                  | Being Determined                   |
| Estimated Non-Federal Cost                     |            | 111,000,000                           | Channels and Canals       | 15                  | Being Determined                   |
| Cash Contributions                             | 54,683,000 |                                       | Recreation                | 0                   | Being Determined                   |
| Other Costs                                    | 56,317,000 |                                       |                           |                     |                                    |
| Total Estimated Project Costs                  |            | 442,000,000                           | Entire Project            | 19                  | Being Determined                   |
| Allocations to 30 September 2000               |            | 65,749,900                            |                           |                     |                                    |
| Conference Allowance for FY 2001               |            | 13,773,000                            |                           |                     |                                    |
| Allocation for FY 2001                         |            | 9,414,000                             | 1/                        |                     |                                    |
| Allocations through FY 2001                    |            | 75,163,900                            | 23%                       |                     |                                    |
| Allocation Requested for 2002                  |            | 9,000,000                             | 26%                       |                     |                                    |
| Programmed Balance to Complete after FY 2002   |            | 246,836,100                           |                           |                     |                                    |
| Unprogrammed Balance to Complete after FY 2002 |            | 0                                     |                           |                     |                                    |

1/ Reflects \$2,208,000 reduction assigned as savings and slippage, \$2,151,000 reprogrammed from the project and \$27,000 rescinded in accordance with the Consolidated Appropriation Act, 2001.

#### PHYSICAL DATA

|                                      |      |
|--------------------------------------|------|
| Relocations - Bridges (Replacement)  | 17   |
| Relocations - Bridges (Modification) | 8    |
| Relocations - Bridges (Construction) | 5    |
| Canals - Miles                       | 11.2 |
| Debris Basins                        | 2    |
| Stilling Areas                       | 2    |

JUSTIFICATION: The intense development in the basin has altered the natural discharge patterns, significantly increased the runoff rates and restricted the flows in the flood plain. There are over 240,000 people living in the 25 square mile drainage basin. The area is over 90% developed and is expected to be 100% developed by the year 2000. Development has progressed to the point where some of the tributary channels are not capable of carrying the two-year storm without causing flooding. In many areas, houses and other buildings are built adjacent to the banks of the channels and further restrict flood flows. Over 5,700 families would be subject to flooding from the 100-year storm under existing conditions. The average annual rainfall is about 71 inches. Average annual benefits are as follows:

| Annual Benefits            | Amount         |
|----------------------------|----------------|
| Inundation Reduction       | 33,629,000     |
| Location                   | 2,299,000      |
| Redevelopment              | 1,499,000      |
| Advance Bridge Replacement | 177,000        |
| Intensification            | 28,403,000     |
| Recreation                 | <u>743,000</u> |
| Total                      | 66,750,000     |

FISCAL YEAR 2002: The requested amount of \$9,000,000 will be applied as follows:

|                                   |                |
|-----------------------------------|----------------|
| Channels and Canals               | 7,500,000      |
| Planning, Engineering, and Design | 900,000        |
| Supervision and Administration    | <u>600,000</u> |
| Total                             | 9,000,000      |



NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the authorizing legislation, the non-Federal sponsor must comply with the requirements listed below for programmed work.

| Requirements of Local Cooperation                                                                                                                                                  | Payments During Construction and Reimbursements | Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|------------------------------------------------------------------------------|
| Provide lands, easements, right-of-way, and dredged material disposal areas.                                                                                                       | 22,055,000                                      |                                                                              |
| Modify or relocate buildings, utilities, roads, bridges (except railroad bridges), and other facilities, where necessary in the construction of the project.                       | 30,538,000                                      |                                                                              |
| Pay one-half of the separable costs allocated to recreation and bear all costs of operation, maintenance, and replacement of recreation facilities.                                | 447,000                                         | -                                                                            |
| Pay 12.37 percent of the first costs allocated to flood control, and bear all cost of operation, maintenance, repair, rehabilitation, and replacement of flood control structures. | <u>59,929,000</u>                               |                                                                              |
| Total Non-Federal Costs                                                                                                                                                            | 112,969,000                                     | 0                                                                            |

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

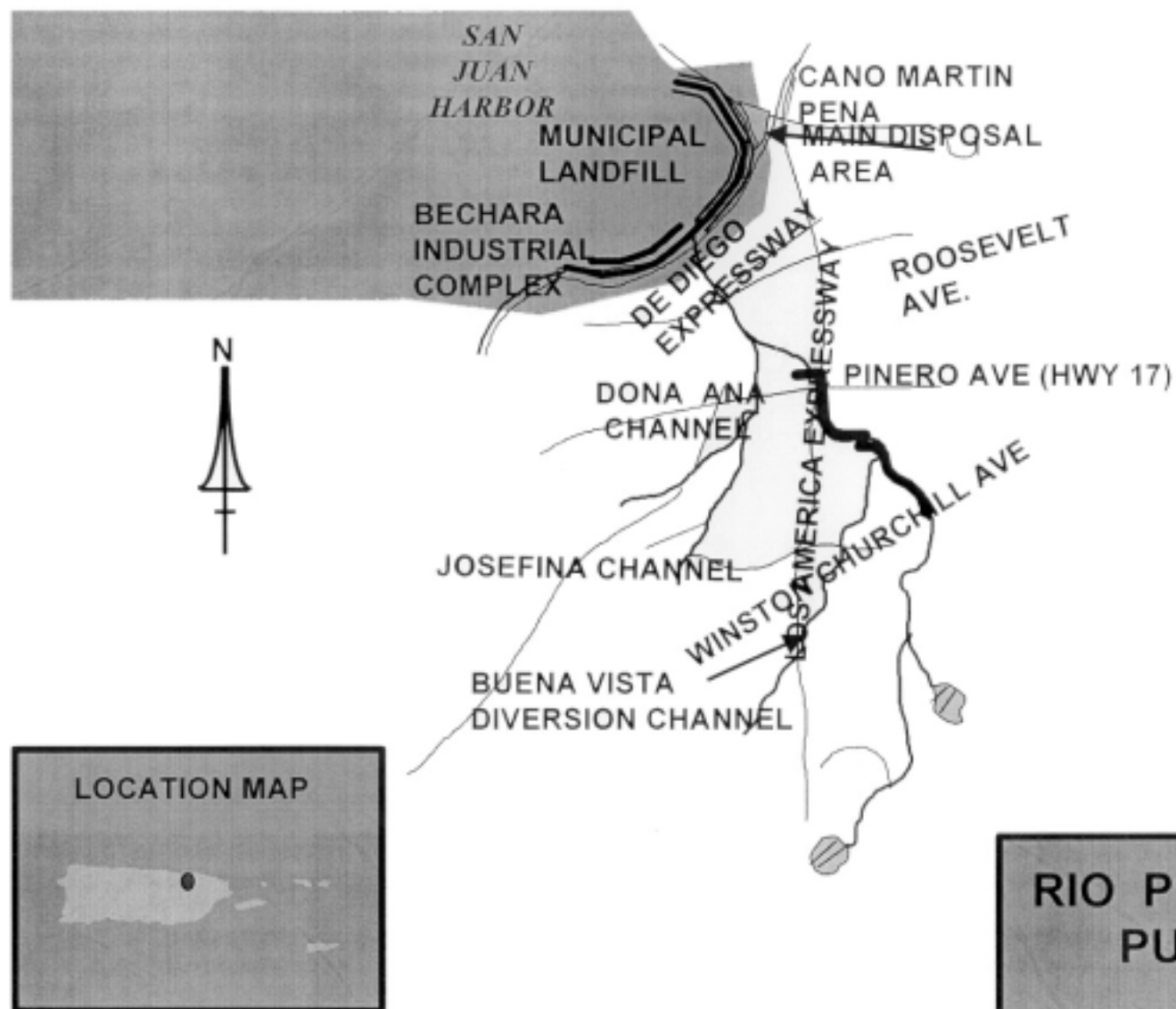
STATUS OF LOCAL COOPERATION: The Commonwealth of Puerto Rico Department of Natural and Environmental Resources is the local sponsor. A Project Cooperation Agreement for the project was executed in March 1994.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps) cost estimate of \$331,000,000 is an increase of \$10,000,000 from the latest estimate (\$321,000,000) presented to Congress (FY 2001). The change includes the following items:

| Item                                      | Amount     |
|-------------------------------------------|------------|
| Price Escalation on Construction Features | 10,000,000 |

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement for the project was filed on 6 December 1985. The Finding of No Significant Impact (FONSI) was approved in July 1992.

OTHER INFORMATION: Funds to initiate preconstruction, engineering and design were appropriated in Fiscal Year 1987. Funds to initiate construction were appropriated in Fiscal Year 1994. The scheduled completion date is being determined.



APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: Roanoke River Upper Basin, Virginia, Headwaters Area (Continuing)

LOCATION: The project is located on the Roanoke River in the City of Roanoke, Virginia.

DESCRIPTION: The project includes about 6.2 miles of channel widening along the 10 miles of river through the City of Roanoke, Virginia. Channel widening will be accomplished with the construction of a benched channel above the elevation of the average streamflow. Other flood damage reduction features include floodproofing at two locations, training walls to prevent floodwater intrusion into low areas along the river, replacement of two low-level bridges which constrict streamflows, and a flood warning system. Recreation facilities consist of a 2.9-mile recreation trail along the project reach and access and parking areas. All work is programmed.

AUTHORIZATION: Water Resources Development Act of 1986 and Energy and Water Development Appropriation Act of 1990.

REMAINING BENEFIT - REMAINING COST RATIO: 1.5 to 1 at 8-7/8 percent.

TOTAL BENEFIT - COST RATIO: 1.01 to 1 at 8-7/8 percent.

INITIAL BENEFIT - COST RATIO: 1.3 to 1 at 8-7/8 percent (FY 1990).

BASIS OF BENEFIT - COST RATIO: Benefits are from the General Design Memorandum approved in January 1990 at 1988 price levels.

| SUMMARIZED FINANCIAL DATA                      |            | ACCUM<br>PCT OF<br>EST<br>FED COST | STATUS<br>(1 Jan 2001) | PERCENT<br>COMPLETE | PHYSICAL<br>COMPLETION<br>SCHEDULE |
|------------------------------------------------|------------|------------------------------------|------------------------|---------------------|------------------------------------|
| Estimated Federal Cost                         |            | \$31,000,000                       |                        |                     |                                    |
| Estimated Non-Federal Cost                     |            | \$ 16,300,000                      | Entire Project         | 21                  | Being Determined                   |
| Cash Contributions                             | 3,687,000  |                                    |                        |                     |                                    |
| Other Costs                                    | 12,613,000 |                                    |                        |                     |                                    |
| Total Estimated Project Cost                   |            | \$47,300,000                       |                        |                     |                                    |
| Allocations to 30 September 2000               |            | \$6,466,000                        |                        |                     |                                    |
| Conference Allowance for FY 2001               |            | 1,000,000                          |                        |                     |                                    |
| Allocation for FY 2001                         |            | 838,000                            | 1/                     |                     |                                    |
| Allocations through FY 2001                    |            | 7,304,000                          | 24                     |                     |                                    |
| Allocation Requested for 2002                  |            | 3,000,000                          | 33                     |                     |                                    |
| Programmed Balance to Complete after FY 2002   |            | 20,696,000                         |                        |                     |                                    |
| Unprogrammed Balance to Complete after FY 2002 |            | 0                                  |                        |                     |                                    |

1/ Reflects \$160,000 reduction assigned as savings and slippage and \$2,000 rescinded in accordance with the Consolidated Appropriations Act, 2001.

#### PHYSICAL DATA

##### Project Features:

|                        |                    |
|------------------------|--------------------|
| Channel Excavation     | 27,000 linear feet |
| Training Wall          | 6,100 linear feet  |
| Paved Recreation Trail | 14,900 linear feet |
| Parking/Access Areas   | 3 each             |
| Riprap                 | 28,000 tons        |

##### Relocations:

|               |                   |
|---------------|-------------------|
| Utility       | 3,880 linear feet |
| Roads         | 2,000 linear feet |
| Overhead Line | 6,350 linear feet |
| Buildings     | 13 each           |
| Bridges       | 2 each            |

PHYSICAL DATA - Continued

|                                      |     |
|--------------------------------------|-----|
| Land Acquisition (acres):            |     |
| Total Rights of Way Requirement      | 195 |
| Flood Control Rights of Way          | 185 |
| Disposal Areas (Temporary)           | 40  |
| Recreation Rights of Way (Separable) | 20  |
| Right of Way Underwater              | 110 |

JUSTIFICATION: The project will provide improvements for flood protection and recreation. Most of the property that would be protected is industrial and commercial with a value of \$680,000,000. The average annual damages in the project area are estimated at \$5,777,000 at October 1988 price levels and 1988 level of development over the next 50 years if no flood control facilities are provided. The project would reduce these damages by \$3,126,200. The maximum flood of record, November 1985, caused damages estimated at \$112,424,000 under 1985 conditions of development and price levels. Damages at 1988 levels of development and October 1988 price levels would be \$119,997,000. Floodplain development is not promoted by the project. Return on investments by local businesses is adversely affected by the flood problem. Firms have to use resources to repair and attempt floodproofing that could be used for expansion and modernization. In this respect, return on investment is suppressed. The project will have a beneficial effect on a variety of firms and increase return on investment throughout the floodplain. Average annual benefits are as follows:

| Annual Benefits         | Amount      |
|-------------------------|-------------|
| Flood Damage Prevention | \$3,126,200 |
| Recreation              | 228,100     |
| Total                   | \$3,354,300 |

FISCAL YEAR 2002: The requested amount will be applied as follows:

|                                                |              |
|------------------------------------------------|--------------|
| Continue Construction of Channel Improvements  | \$ 2,273,000 |
| Continue Monitoring of Endangered Species      | 20,000       |
| Continue Construction of Training Walls        | 155,000      |
| Continue Construction of Recreation Facilities | 214,000      |
| Planning, Engineering and Design               | 88,000       |
| Construction Management                        | 250,000      |
| Total                                          | \$ 3,000,000 |

Division: South Atlantic

District: Wilmington

Roanoke River Upper Basin, VA, Headwaters Area

3 April 2001

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NON-FEDERAL COSTS: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsor must comply with the requirements listed below:

|                                                                                                                                                                                                                                    | Payments During<br>Construction and<br>Reimbursements | Annual Operation,<br>Maintenance, Repair,<br>Rehabilitation, and<br>Replacement Costs |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|---------------------------------------------------------------------------------------|
| Requirements of local Cooperation                                                                                                                                                                                                  |                                                       |                                                                                       |
| Provide all lands, easements, and rights of way including suitable spoil disposal areas                                                                                                                                            | \$ 9,391,000                                          |                                                                                       |
|                                                                                                                                                                                                                                    | 3,245,000                                             |                                                                                       |
| Modify or relocate buildings, utilities, roads and other facilities except railroad bridges, where necessary for construction of the project.                                                                                      | 10,000                                                |                                                                                       |
| Pay 25 percent of the cost of the flood warning system (partially offset by a credit for lands, easements, rights of way, and relocations).                                                                                        | 2,100,000                                             | \$101,000                                                                             |
| Pay 5 percent of the total cost allocated to flood control in cash in addition to all lands, easements, rights of way and relocations, and bear all costs of operation, maintenance, and replacement of flood control facilities.  | 1,187,000                                             | 9,000                                                                                 |
| Pay one-half of the separable cost allocated to recreation (partially offset by a credit for land, easements, rights of way and relocations) and bear all costs of operation, maintenance and replacement of recreation facilities | 367,000                                               |                                                                                       |
| Pay 25 percent of the cost of the non-structural floodproofing (partially offset by a credit for lands, easements, rights of way and relocations).                                                                                 |                                                       |                                                                                       |
| Total Non-Federal Costs                                                                                                                                                                                                            | \$16,300,000                                          | \$110,000                                                                             |

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: The City of Roanoke is the project sponsor. On 11 April 1989 the voters of the City of Roanoke approved the sale of \$7.5 million worth of bonds to pay Roanoke's required cash contribution, acquire lands that are not currently owned and pay for relocation of bridges and utilities. The Local Cooperation Agreement was executed on 25 June 1990. A supplement to the Local Cooperation Agreement addressing the reimbursement for the floodproofing of the hospital was executed in January 1993. Design and construction of the project had been deferred for eight years due to concerns the sponsor

STATUS OF LOCAL COOPERATION (continued):

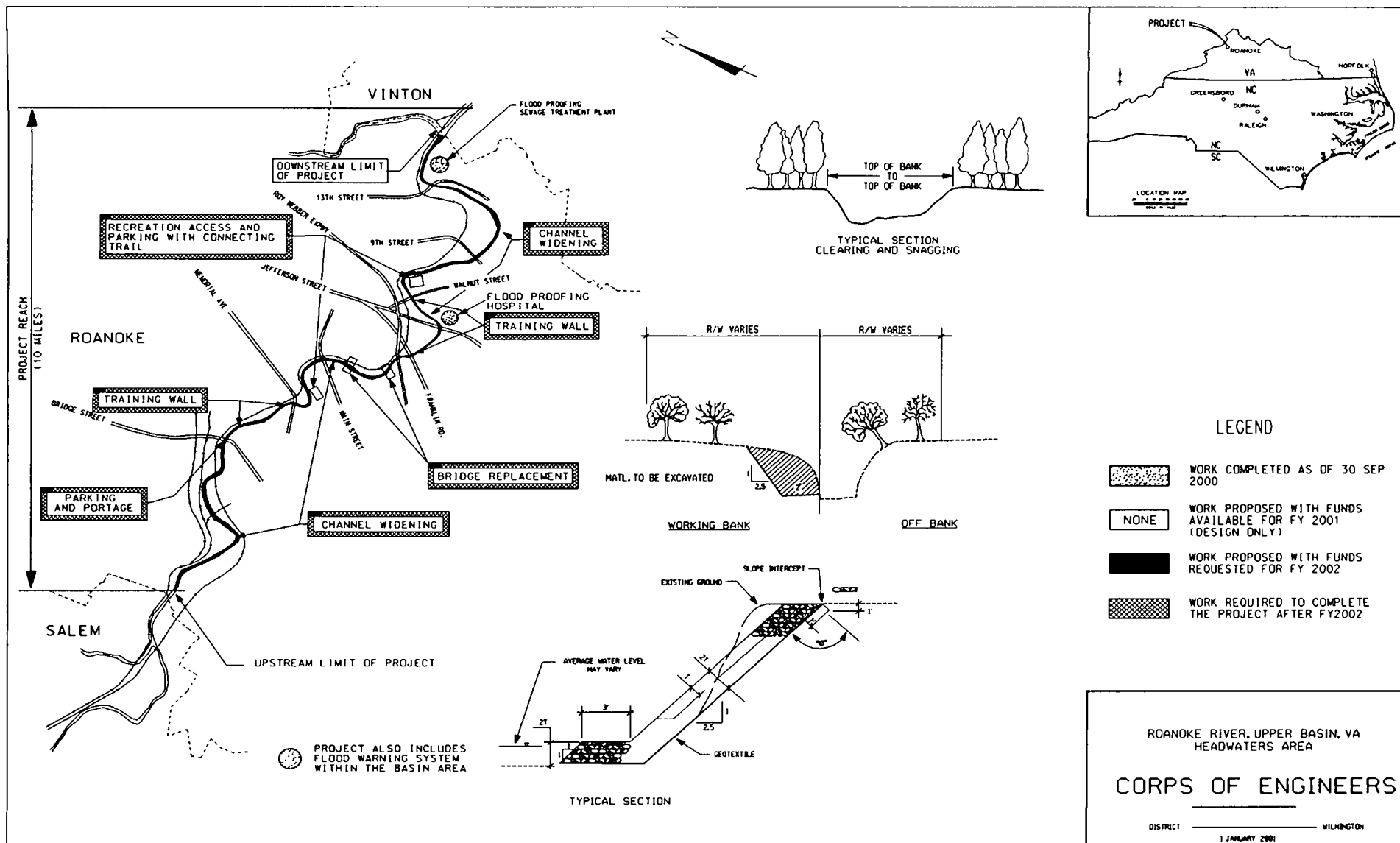
had over assuming liability for potential HTRW issues that might arise during project construction. The City in conjunction with the Corps, EPA and the Virginia Department of Environmental Quality conducted an extensive investigation and review of the project right of way to alleviate these concerns. Hazardous material was found at two sites. These sites have been cleaned by the land owner. Soil contamination was found at 14 other sites. A project action plan for the screening and disposal of this material has been prepared and reviewed by the sponsor and the Virginia Department of Environmental Quality. They have agreed with our assessment of the soil condition and our proposed land farming disposal method.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps) cost estimate of \$31,600,000 is an increase of \$1,900,000 from the latest estimate (\$29,700,000) presented to Congress (FY 2001). This change includes the following items.

| Item                                                 | Amount       |
|------------------------------------------------------|--------------|
| Price Escalation on Construction Features            | +\$ 900,000  |
| Design Changes                                       | 450,000      |
| Post Contract Award and other Estimating Adjustments | 550,000      |
| Total                                                | +\$1,900,000 |

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final environmental impact statement was filed with the Environmental Protection Agency in February 1985. A Finding of No Significant Impact for design changes was signed on 30 June 1989.

OTHER INFORMATION: Funds to initiate preconstruction engineering and design were appropriated in FY 1986 and funds to initiate construction were appropriated in FY 1990. The project was modified by the Energy and Water Development Appropriations Act of 1990 to increase the total estimated project cost to \$29,000,000 (October 88 price levels). The Roanoke Logperch, which is located in the project area, was listed as an endangered species effective 18 September 1989 and will be monitored during project construction. Reimbursement for the Federal share of the floodproofing of Roanoke Hospital, as authorized by Section 102cc of the Water Resources Development Act of 1990, in the amount of \$501,000, was made in February 1993.





APPROPRIATION TITLE: Construction, General – Multiple Purpose Power

PROJECT: Richard B. Russell Dam and Lake, Georgia and South Carolina (Continuing)

LOCATION: The project is located on the Savannah River about 275 miles above the mouth, 16 miles southeast of Elberton, Georgia and between the existing J. Strom Thurmond and Hartwell Lakes.

DESCRIPTION: The project consists of a concrete gravity-type dam, flanked by earth embankments with a maximum height of 200 feet above the river. The total length of 5,616 feet consists of a 1,884-foot concrete section and embankments of 3,732 feet. The gate-controlled spillway has a design capacity of 800,000 c.f.s. The project includes the installation of 328 megawatts of conventional power completed in January 1986 and 320 megawatts of reversible pumped storage power for a total available capacity of 648 megawatts. All work is programmed.

AUTHORIZATION: Flood Control Act of 1966, modified by the Water Resources Development Act of 1976 and the Water Resources Development Act of 1986.

REMAINING BENEFIT - REMAINING COST RATIO: Not applicable because project construction is substantially complete

TOTAL BENEFIT - COST RATIO: 1.9 to 1 at 3 1/4 percent.

INITIAL BENEFIT - COST RATIO: 2.0 to 1 at 3 1/4 percent (FY 1972).

BASIS OF BENEFIT - COST RATIO: Benefits are from the cost allocation study completed in December 1991 at October 1991 price levels.

| SUMMARIZED FINANCIAL DATA                      |             | ACCUM<br>PCT OF<br>EST<br>FED COST | STATUS<br>(1 Jan 2001) | PERCENT<br>COMPLETE | PHYSICAL<br>COMPLETION<br>SCHEDULE |
|------------------------------------------------|-------------|------------------------------------|------------------------|---------------------|------------------------------------|
| Estimated Total Appropriation Requirement      | 618,100,000 |                                    | Entire Project         | 97                  | Being determined                   |
| Future Non-Federal Reimbursement               | 590,583,000 |                                    |                        |                     |                                    |
| Estimated Federal Cost (Ultimate)              | 27,517,000  |                                    |                        |                     |                                    |
| Estimated Non-Federal Cost                     | 592,483,000 |                                    |                        |                     |                                    |
| Cash Contributions                             | 1,900,000   |                                    |                        |                     |                                    |
| Reimbursements                                 | 590,583,000 |                                    |                        |                     |                                    |
| Total Estimated Project Cost                   | 620,000,000 |                                    |                        |                     |                                    |
| Allocations to 30 September 2000               | 600,801,000 |                                    |                        |                     |                                    |
| Conference Allowance for FY 2001               | 2,666,000   |                                    |                        |                     |                                    |
| Allocation for FY 2001                         | 3,034,000   | 1/                                 |                        |                     |                                    |
| Allocations through FY 2001                    | 603,835,000 | 98                                 |                        |                     |                                    |
| Allocation Requested for 2002                  | 3,000,000   | 98                                 |                        |                     |                                    |
| Programmed Balance to Complete after FY 2002   | 11,265,000  |                                    |                        |                     |                                    |
| Unprogrammed Balance to Complete after FY 2002 | 0           |                                    |                        |                     |                                    |

1/ Reflects \$427,000 reduction assigned as savings and slippage, \$800,000 reprogrammed to the project, and \$5,000 rescinded in accordance with the Consolidated Appropriations Act, 2001.

| PHYSICAL DATA                                                                |         |                                |         |
|------------------------------------------------------------------------------|---------|--------------------------------|---------|
| Dam                                                                          |         | Relocations-Roads (Miles)      | 19.5    |
| Type: Concrete Gravity, flanked by earth embankments                         |         | Railroads (Miles)              | 9.1     |
| Maximum Height (Feet)                                                        | 200     | Initial Power Installation     |         |
| Length                                                                       |         | 4 Conventional Units (MW)      | 82      |
| Concrete Section (Feet)                                                      | 1,884   | 4 Pump Storage Units (MW)      | 80      |
| Embankments (Feet)                                                           | 23,732  | Normal Average Head (Feet)     | 144     |
| Spillway                                                                     |         | Reservoir Capacity (Acre-feet) |         |
| Type: Gate Controlled                                                        |         | Flood Control                  | 140,000 |
| Design Capacity (c.f.s)                                                      | 800,000 | Power                          | 126,800 |
| Lands and Damages (Acres)                                                    | 53,112  | Dead Storage                   | 899,400 |
| Type: Predominantly timber and Agricultural Improvements: Typical farm units |         |                                |         |

JUSTIFICATION: The 648 megawatts installation, including pumped storage, will help meet the increased power requirements and rapid growth demands in this region. The output can be marketed and fully utilized immediately upon project completion in Federal Energy Regulatory Commission (FERC) supply areas 21, 22, and 23. This includes all of South Carolina, most of North Carolina, Georgia, Alabama, and parts of Mississippi and Florida. The FERC has stated repeatedly the need for this power source. This project will be an integral unit of the plan for development of the Savannah River Basin for flood control, navigation, power, and allied purposes. The recreational facilities will serve an area within a large zone of influences surrounding the three-lake complex of J. Strom Thurmond, Hartwell, and Richard B Russell lakes. The estimated initial attendance at the project was 1,000,000 and should exceed 4,600,000 in the early 2000's. Average annual benefits are as follows:

| Annual Benefits    | Amount     |
|--------------------|------------|
| Power              | 52,995,000 |
| Flood Control      | 177,000    |
| Recreation         | 3,597,000  |
| Fish and Wildlife  | 71,000     |
| Area Redevelopment | 4,212,000  |
| Total              | 61,052,000 |

FISCAL YEAR 2002: The requested amount will be applied as follows:

|                                                               |             |
|---------------------------------------------------------------|-------------|
| Continue environmental monitoring of pumped storage operation | 300,000     |
| Continue work on JST 02 System contracts for pumped storage   | 800,000     |
| Continue work on Main Breakers and Static Start               | 1,400,000   |
| Planning, Engineering and Design                              | 150,000     |
| Construction Management                                       | 350,000     |
| Total                                                         | \$3,000,000 |

NON-FEDERAL COST: In accordance with Public Law 89-72, agreements for recreation development with the States of Georgia and South Carolina have been executed and were approved by the Secretary of the Army 20 May 1974. The costs allocable to power are reimbursable, and will be reviewed and adjusted, based on construction costs when the project becomes operational.

|                                                                                                                                              | Payments During<br>Construction and<br>Reimbursements | Annual Operation,<br>Maintenance, Repair,<br>Rehabilitation, and<br>Replacement Costs |
|----------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|---------------------------------------------------------------------------------------|
| Requirements of local Cooperation                                                                                                            |                                                       |                                                                                       |
| Capital Cost allocated to power.                                                                                                             | 5,71,810,000                                          | 3,557,000                                                                             |
| Pay, contribute in kind, or repay (repayment not to exceed 50 years) with interest, one-half of the separable costs allocated to recreation. | 20,673,000                                            |                                                                                       |
| Bear all costs of operation, maintenance, repair, rehabilitation, and replacement of recreation facilities.                                  | 0                                                     | 249,000                                                                               |
| Total Non-Federal Costs                                                                                                                      | 592,483,000                                           | 3,806,000                                                                             |

STATUS OF LOCAL COOPERATION: The State of Georgia began payments for recreation reimbursements in May 1985. The State of South Carolina began payments in August 1985. Responsibility for repayment of power costs rests with the Southeastern Power Administration pursuant to Federal Laws.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$618,100,000 is the same as the latest estimate presented to Congress (FY 2001).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement (EIS) on conventional installation was submitted to Council on Environmental Quality (CEQ) on 31 May 1974. A supplement on water quality to the final EIS was filed with CEQ in May 1976. The final EIS on pumped storage was filed with the Environmental Protection Agency (EPA) in October 1979. The Supplement on fish and wildlife mitigation to the final EIS was filed with the EPA in December 1981. A supplement to the final EIS on pumped storage was filed in August 1991. A final NEPA document (Environmental Assessment) now based on 4 ½ years of environmental testing is complete. It embodies those technical items that the Corps of Engineers (COE) and South Carolina have reached agreement on, relating to operational measures, construction of an O2 system to increase fish habitat and continued environmental monitoring of a commercial operation. The EA for Pumped Storage was completed in FY 1999 and the FONSI was signed in August 1999.

OTHER INFORMATION: Funds to initiate preconstruction planning were appropriated in FY 1968. Funds to initiate land acquisition were appropriated in FY 1971 and allocated in FY 1972. Initial construction funds were appropriated in FY 1975.

A preliminary injunction halting the installation of pumped storage was issued on 23 May 1988. A hearing on the merits of our appeal for injunctive relief was held on 8 December 1988 in the 4<sup>th</sup> Circuit Court of Appeals in Richmond, Virginia. On 24 January 1989, the Richmond 4<sup>th</sup> Circuit Court of Appeals granted injunctive relief to the COE to only install the reversible pump turbines. Testing and operation is contingent on demonstrating through the supplemental EIS process that units can be operated in a responsible manner without unduly impacting existing fish habitat. With the record-of-decision on the Supplemental EIS, dated 4 September 1991, the Corps completed a settlement with the litigants to proceed forward into a phased testing and monitoring plan to address environmental issues concerning pumped storage. On 6 December 1991, the Federal District Court of Charleston, South Carolina, modified the pump storage injunction to permit testing of the first pumped storage units and permit advertising of the pumped storage conveyance channel.

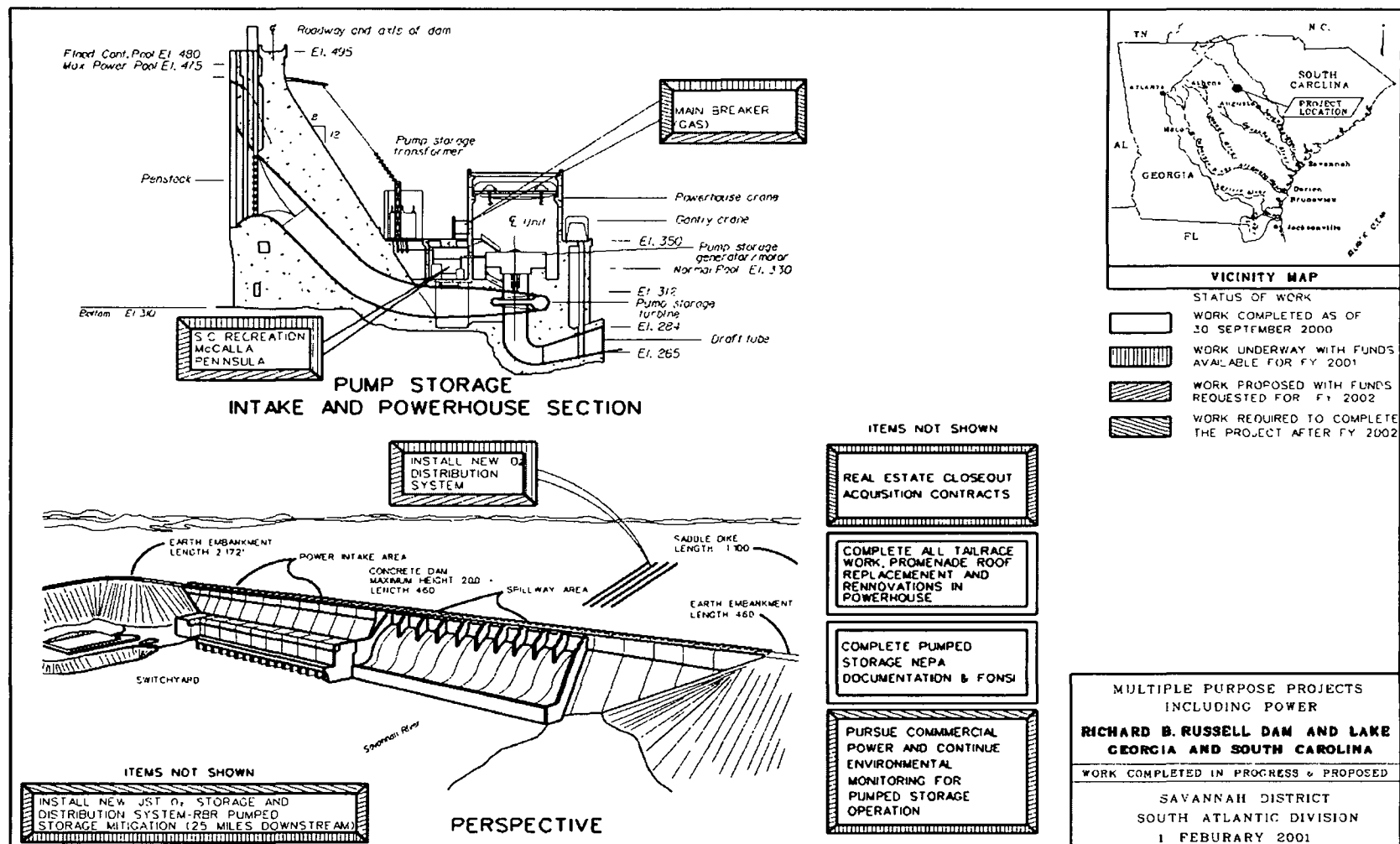
On 8 April 1992, the Charleston District Federal Court granted injunctive relief to allow environmental testing of the pumped storage units from May 1992 through October 1993 (subsequently from March 1993 through October 1996) and allow the award of the dredging of the tailrace channel. This schedule conforms to the Federal Court and the Corps commitment to the resource agencies as stated in the supplement to the final environmental impact statement record-of-decision. Environmental clearance for dredging was attained 27 May 1994. Dredging the tailrace conveyance channel was tied to the phased testing process in accordance with the consent order and it was included in the final EIS on pumped storage. The dredging was completed in March 1995. The Vortex Fix scheduled for unit eight was awarded in February 1994 and installation was completed in December 1994. A second contract was awarded in February 1996 and completed in March 1996. This contract, a Rock Jetty Flow Diversion Structure, was fully successful in eliminating the remaining vortex influence on fish entrainment at Unit eight.

After 4 ½ years, environmental testing is now complete at Richard B. Russell Dam and Lake. The Savannah District completed the Final Phase III Environmental Report for Interagency Review and comment in August 1997. Review of the data from Phase III final testing of full operations (April 1996 through October 1996) indicates minimal environmental impact to the fishery and possible environmental impact to water quality due to thermal warming to 27 degrees centigrade, which exceeds the comfort range of large striped bass by one degree of the Tailwater Region. This thermal impact can exist in the summer months.

OTHER INFORMATION (Continued):

The South Carolina Department of Natural Resources requested full compensation for fish losses throughout the remaining life of the turbines (45 years) and a four month moratorium on springtime pumping as an offer to avoid final litigation action in Federal District Court. We have since agreed upon limited springtime pumping for the months of March, April, and May which will not impact the dependable annual capacity and marketing of this power, and will further reduce already very low numbers of springtime sport fish entrainment. The Corps and the Department of Justice cannot pay compensation for fish losses. The remaining impasse to reaching an agreement rests in the legal arena. The plaintiffs, SCDNR and NWF refuse to release USACE from the current injunction, because the Corps of Engineers could not agree to the state's demands for authority to approve any change in operation of the project and for payment to the state for fish killed. The Government also refused to construct recreational facilities demanded by the State of Georgia unrelated to mitigation for this project. The Savannah District will implement springtime pumping limitations and other agreed upon mitigation measures as described herein, which are appropriate, and within our authorities. The commitment and decision to operate the project in accordance with these measures are contained in the final NEPA documentation signed 17 August 1999. The NEPA decision document and Finding of No Significant Impact (FONSI) was signed by Colonel Joseph K. Schmitt, the Savannah District Commander. Funding for the JST o2 system and other measures have been approved but construction and implementation is dependent upon release from the injunction.

The Pumped Storage can be declared commercially available in FY 2001 with a favorable decision from U.S. District Court. A Hearing on the Corps' request for summary judgement to dismiss the injunction was conducted on 17 October 2000 in the Charleston, SC U.S. District Court. We expect a decision before the end of the calendar year. If the decision is appealed to the 4<sup>th</sup> Circuit Court in Richmond, VA, then a dismissal of the injunction may take another four to six months.



APPROPRIATION TITLE: Construction, General – Dam Safety Assurance (Multiple Purpose Power)

PROJECT: Hartwell Lake, Clemson Upper and Lower Diversion Dams, South Carolina (Seismic Deficiency Correction) (Continuing)

LOCATION: The Hartwell project is located on the Savannah River, Georgia and South Carolina, 289 miles above the mouth, 89 miles above Augusta, Georgia, and 67 miles above J. Strom Thurmond Dam. The Clemson Diversion Dams which are a part of the Hartwell project are located adjacent to Clemson, South Carolina, in the Seneca River channel, South Carolina, approximately 20 miles above the confluence of the Seneca River and the Savannah River, and 27 miles above Hartwell Dam.

DESCRIPTION: The Clemson Diversion Dams were constructed in 1960-61 as part of the Hartwell project to prevent flooding of valuable lands, recreation facilities, structures, roads, and athletic facilities of Clemson University by impounded water behind Hartwell Dam. The dams were constructed of mostly random earth fill and founded on alluvium with inclined chimney drain and horizontal drainage blanket for internal seepage control. Concrete cutoff walls were installed in 1983-84 to alleviate seepage problems, which had occurred since construction. The Upper Diversion Dam has a maximum height of 75 feet and a length of 2,100 feet. The Lower Diversion Dam has a maximum height of 75 feet and a length of 3,000 feet. The design of the dams, which was performed in the late 1950's, did not consider earthquake loading. Both dams were constructed on floodplain alluvium, and exploratory soil borings have revealed the presence of a continuous layer of loose, saturated cohesionless materials in the foundation of each dam.

AUTHORIZATION: The Flood Control Acts of 1950 and 1958.

REMAINING BENEFIT - REMAINING COST RATIO: Not applicable.

TOTAL BENEFIT - COST RATIO: Not applicable.

INITIAL BENEFIT - COST RATIO: Benefits are non-monetary.

BASIS OF BENEFIT - COST RATIO: Not applicable.



| SUMMARIZED FINANCIAL DATA                      |           | ACCUM<br>PCT OF<br>EST<br>FED COST | STATUS<br>(1 Jan 2001) | PERCENT<br>COMPLETE | PHYSICAL<br>COMPLETION<br>SCHEDULE |
|------------------------------------------------|-----------|------------------------------------|------------------------|---------------------|------------------------------------|
| Estimated Total Appropriation Requirement      |           | 8,741,000                          | Entire Project         | 1                   | Being determined                   |
| Future Non-Federal Reimbursement               |           | 1,180,000                          |                        |                     |                                    |
| Estimated Federal Cost (Ultimate)              |           | 7,561,000                          |                        |                     |                                    |
| Estimated Non-Federal Cost                     |           |                                    |                        |                     |                                    |
| Cash Contributions                             | 0         |                                    |                        |                     |                                    |
| Reimbursements                                 | 1,180,000 |                                    |                        |                     |                                    |
| Total Estimated Project Cost                   |           | 8,741,000                          |                        |                     |                                    |
| Allocations to 30 September 2000               |           | 0                                  |                        |                     |                                    |
| Conference Allowance for FY 2001               |           | 0                                  |                        |                     |                                    |
| Allocation for FY 2001                         |           | 400,000                            |                        |                     |                                    |
| Allocations through FY 2001                    |           | 400,000                            | 5                      |                     |                                    |
| Allocation Requested for 2002                  |           | 2,500,000                          | 33                     |                     |                                    |
| Programmed Balance to Complete after FY 2002   |           | 5,841,000                          |                        |                     |                                    |
| Unprogrammed Balance to Complete after FY 2002 |           | 0                                  |                        |                     |                                    |

#### PHYSICAL DATA

##### Upper Diversion Dam:

Constructed of earth fill on alluvium with inclined chimney drain, horizontal drainage blanket, and concrete cutoff walls. Length is 2,100 feet. Average height is 55 feet.

##### Lower Diversion Dam:

Constructed of earth fill on alluvium with inclined chimney drain, horizontal drainage blanket, and concrete cutoff walls. Length is 3,000 feet. Average height is 55 feet.

Division: South Atlantic

District: Savannah

Hartwell Lake, Clemson Upper and Lower Diversion Dams, SC

3 April 2001

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JUSTIFICATION: The results of dynamic analyses, including finite element analyses, performed using data obtained from field and laboratory investigations, indicate that upon the occurrence of a maximum credible earthquake (MCE) event, a liquefaction failure of the downstream section of the Clemson Upper and Lower Diversion Dams could occur. The MCE event for the dams has a peak ground acceleration of 0.19g. More critically, additional analyses indicate that the downstream failure could be triggered by lesser earthquake events having acceleration in the range of 0.07 to 0.10g. The earthquake producing this level of shaking has a return frequency of about 475 years. Stated another way, such an event has about a 1 in 10 chance of occurring in any 50-year period. This is a relatively frequent, high probability event. Failure of the downstream slopes would cause severe cracking of the embankments. The highly erodible nature of the silty sands and sandy silts of which the embankments are constructed will lead to rapid erosion through the cracks which will result ultimately in catastrophic failure of the dams and complete loss of the reservoir pool. In the event of dam failure, 390 acres of Clemson University would be inundated. This area has a constant low population, which increases to 100,000 people during a football game. Substantial loss of life could occur, in addition to physical and economic damages to the university totaling 1.158 billion dollars. The effects of a dam failure on the local economy would also be devastating and adverse economic impact would extend to the nearby small communities whose economic reliance on the university is considerable. Remediation of the downstream section of each dam is recommended to assure the dams will survive and remain safe during and following the MCE event. The recommended remediation plan utilizes overlapping deep soil mix columns penetrating through the loose alluvium layer to create 50-foot long transverse walls oriented perpendicular to the axis of each dam. The walls would serve as shear walls to resist the earthquake loading. A long wall parallel to the dam axis would be constructed at the upstream end of the transverse walls. This wall would prevent loosened alluvium from squeezing or flowing between the transverse walls. The proposed remediation will prevent catastrophic failure of the dams and preclude loss of life and severe economic consequences to Clemson University and the surrounding region. In accordance with ER 1110-2-1155, Dam Safety Assurance Program, dated 12 September 1997, a South Atlantic Division (SAD) approved dam safety evaluation report was submitted to Headquarters USACE (CECW-EP) on 18 May 2000.

FISCAL YEAR 2002: The requested amount will be applied as follows:

|                                   |             |
|-----------------------------------|-------------|
| Initiate Construction             | 2,250,000   |
| Planning, Engineering, and Design | 80,000      |
| Construction Management           | 170,000     |
| Total                             | \$2,500,000 |

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the Water Resources Development Act of 1986, the non-Federal sponsors must comply with the requirements listed below:

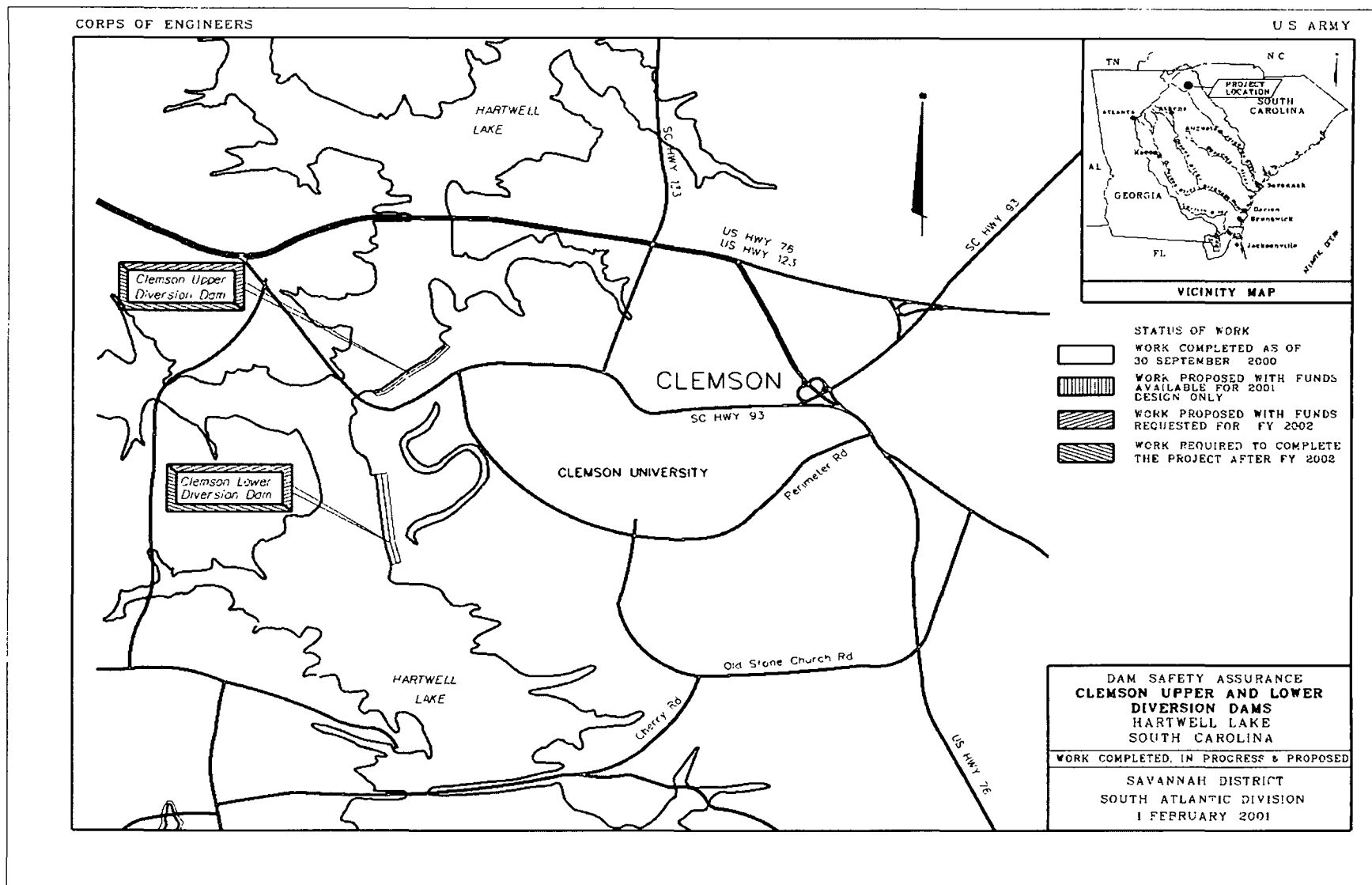
|                                                       | Payments During<br>Construction and<br>Reimbursements | Annual Operation,<br>Maintenance, Repair,<br>Rehabilitation, and<br>Replacement Costs |
|-------------------------------------------------------|-------------------------------------------------------|---------------------------------------------------------------------------------------|
| Requirements of local Cooperation                     |                                                       |                                                                                       |
| Pay 15 percent of the cost allocated to hydropower.   | 1,169,500                                             |                                                                                       |
| Pay 15 percent of the cost allocated to water supply. | 10,500                                                |                                                                                       |
| Total Non-Federal Costs                               | 1,180,000                                             |                                                                                       |

STATUS OF LOCAL COOPERATION: Not applicable.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal Corps cost estimate of \$8,741,000 is the initial estimate presented to Congress.

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The May 2000 Dam Safety Assurance Program Evaluation Report concluded that no significant adverse environmental impacts would result from the implementation of the proposed recommended remediation plan. Furthermore, implementation of the recommended remediation plan would comply with the Executive Order 12898 concerning environmental justice. In accordance with 33 CFR 230.9(b), the project is categorically excluded from NEPA coordination. No further documentation is required.

OTHER INFORMATION: Initial Construction General Funds were provided in FY 2001 from the Dam Safety Assurance Program. Funds for preparing the Dam Safety Assurance Program Evaluation Report were provided by the civil works O&M program.



APPROPRIATION TITLE: Construction, General - Local Protection (Flood Control)

PROJECT: Central and Southern Florida, Florida (Continuing)

LOCATION: The project is located in the southeasterly 18 counties of the State of Florida. Principle areas are the Upper St. Johns River Basin, Kissimmee River Basin, Lake Okeechobee-Everglades Area, and East Coast-Everglades Area.

DESCRIPTION: The Central and Southern Florida Project involves an area of about 18,000 square miles, which includes all or part of 18 counties in central and southern Florida. It embraces Lake Okeechobee, its regulatory outlets, the Florida Everglades, The Upper St. Johns (which is not part of Everglades ecosystem) and Kissimmee River Basins, and the lower east coast of Florida. Project purposes are flood control; municipal, industrial, and agricultural water supply; prevention of salt water intrusion, water supply for Everglades National Park; fish and wildlife preservation; navigation; and recreation. In addition to completed work, portions of the Upper St. Johns River, South Dade County, Port Mayaca Recreation, Kissimmee Basin, West Palm Beach Canal, Agricultural Area, Lake Okeechobee, Manatee Pass-Through Gates, North Dade County, and the Comprehensive Everglades Restoration Program separate elements are currently programmed; all remaining separable elements are unprogrammed. Modified Water Deliveries to Everglades National Park will be accomplished with funds transferred to the Corps of Engineers by National Park Service. The restoration of the Kissimmee River Project is being accomplished with a separate appropriation.

AUTHORIZATION: Flood Control Acts of 1948, 1954, 1960, 1962, 1965, and 1968; Authorization in 1970 under Section 201 of the Flood Control Act of 1965, and the Water Resources Development Acts of 1986, 1988, 1990, 1992, 1996, 1999, and 2000.

REMAINING BENEFIT - REMAINING COST RATIO: 4.0 to 1 at 2-1/2 percent.

TOTAL BENEFIT - COST RATIO: 4.8 to 1 at 2-1/2 percent.

INITIAL BENEFIT - COST RATIO: 2.1 to 1 at 2-1/2 percent (FY 1950).

BASIS OF BENEFIT - COST RATIO: Benefits are a composite of the latest benefits available from the individual reports of the separable elements of the total project.

| SUMMARIZED FINANCIAL DATA                      |               |               | ACCUM<br>PCT OF<br>EST<br>FED COST | STATUS<br>(1 Jan 2001) | PCT<br>CMPL | PHYSICAL<br>COMPLETION<br>SCHEDULE |
|------------------------------------------------|---------------|---------------|------------------------------------|------------------------|-------------|------------------------------------|
| Estimated Federal Cost (CoE)                   |               | 2,219,000,000 |                                    | Misc Completed Works   | 100         | Oct 1992                           |
| Programmed Construction                        | 1,631,345,000 |               |                                    | Upper St. Johns River  | 94          | Being determined                   |
| Unprogrammed Construction                      | 587,655,000   |               |                                    | West Palm Beach        | 40          | Being determined                   |
|                                                |               |               |                                    | South Dade County      | 31          | Being determined                   |
| Estimated Federal Cost (OFA)                   |               | 46,000,000    |                                    | Manatee Pass Gates     | 24          | Being determined                   |
| Programmed Construction                        | 46,000,000    |               |                                    | Everglades Restoration | 0           | Being determined                   |
| Unprogrammed Construction                      | 0             |               |                                    |                        |             |                                    |
|                                                |               |               |                                    | Entire Project         | 30          | Being determined                   |
| Estimated Non-Federal Cost                     |               | 1,568,200,000 |                                    |                        |             |                                    |
| Programmed Construction                        | 1,225,829,000 |               |                                    |                        |             |                                    |
| Cash Contributions                             | 500,929,000   |               |                                    |                        |             |                                    |
| Other Costs                                    | 724,900,000   |               |                                    |                        |             |                                    |
| Estimated Non-Federal Cost                     |               |               |                                    |                        |             |                                    |
| Unprogrammed Construction                      | 342,371,000   |               |                                    |                        |             |                                    |
| Cash Contributions                             | 168,006,000   |               |                                    |                        |             |                                    |
| Other Costs                                    | 174,365,000   |               |                                    |                        |             |                                    |
| Total Estimated Programmed Construction Cost   |               | 2,903,174,000 |                                    |                        |             |                                    |
| Total Estimated Unprogrammed Construction Cost |               | 930,026,000   |                                    |                        |             |                                    |
| Total Estimated Project Cost                   |               | 3,833,200,000 |                                    |                        |             |                                    |
| Allocations to 30 September 2000               |               | 505,432,000   |                                    |                        |             |                                    |
| Conference Allowance for FY 2001               |               | 80,423,000    |                                    |                        |             |                                    |
| Allocation for FY 2001                         |               | 54,586,000    | 1/                                 |                        |             |                                    |
| Allocations through FY 2001                    |               | 560,018,000   | 25%                                |                        |             |                                    |
| Allocation Requested for 2002                  |               | 95,278,000    | 29%                                |                        |             |                                    |
| Programmed Balance to Complete after FY 2002   |               | 973,049,000   |                                    |                        |             |                                    |
| Unprogrammed Balance to Complete after FY 2002 |               | 587,655,000   |                                    |                        |             |                                    |

1/ Reflects \$12,868,000 reduction assigned as savings and slippage and \$12,811,000 reprogrammed from the project and \$158,000 rescinded in accordance with the Consolidated Appropriations Act, 2001.

Division: South Atlantic

District: Jacksonville

Central and Southern Florida, FL

3 April 2001

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| PHYSICAL DATA                                    |     |                |       |
|--------------------------------------------------|-----|----------------|-------|
| Pumping Plants (Number)                          | 35  | Locks (Number) | 25    |
| Floodway Control & Diversion Structures (Number) | 235 | Canals (Miles) | 977   |
| Relocations-Highways (Bridges)                   | 2   | Levees (Miles) | 1,008 |
| Relocations-Railroads (Bridges)                  | 56  |                |       |

JUSTIFICATION: The Central and Southern Florida project was originally authorized and designed as a flood control project in response to the maximum flood of record in 1947. Existing damages, without the project, were \$59,693,000 (\$366,903,000 at 1 October 1989 price levels). The 1947 flood frequency averages 1 in 25 years over the project area, with an average duration of 70 days. Minor floods occur almost yearly in the project area and major floods occur frequently. This situation is aggravated by wet antecedent conditions followed by heavy seasonal rainfall. The average degree of protection provided by the completed project is about a 10-year flood frequency protection. Approximately 2,853,700 acres are protected. This encompasses 2,765,100 agricultural acres and 88,600 urban acres. The present value of property subject to flood damages is about \$12.3 billion. Property types include residential, commercial, industrial, public, and agricultural.

Average annual damages without the project would be \$110,580,000 and \$22,536,000 with the project. Damages attributable to urban property are 16.7 percent and 83.3 percent are attributable to rural property. The proportion of average annual damages prevented are 36.8 percent to existing development and 63.2 percent to future development.

Under Public Law 90-483 (River and Harbor Act of 1968), additional project features for the purpose of water supply were added to the Central and Southern Florida project. The storage capacity of the entire project is 2,953,000 average annual acre-feet divided into approximately 1,600,000 acre-feet for urban use by 2020 and 740,000 acre-feet for agricultural use by 2020. The Everglades National Park receives virtually its entire source of water (other than direct rainfall) from the Central and Southern Florida Project. The pumping rate for irrigation of 590 square miles would yield approximately 917,850 acre-feet per year for agricultural use. Recurrent drought conditions with resultant low flows require supplemental irrigation to ensure adequate crops yields.

Average annual benefits are as follows:

| Annual Benefits                       | Amount           |
|---------------------------------------|------------------|
| Flood Control                         | 235,213,000      |
| Municipal and Industrial Water Supply | 25,664,000       |
| Agricultural Water Supply             | 27,614,000       |
| Recreation                            | 11,109,000       |
| Fish and Wildlife                     | 238,000          |
| Area Redevelopment                    | <u>3,012,000</u> |
| Total                                 | 302,850,000      |

JUSTIFICATION (Continued):

Public Law 90-483 in addition to Public Law 101-229 (Everglades National Park Protection and Expansion Act) have authorized modifications to the project for environmental restoration in the C-111 basin. The South Dade County effort will restore natural hydrologic conditions in Taylor Slough within Everglades National Park for the purpose of restoring the historic diversity and abundance of the native flora and fauna.

FISCAL YEAR 2002: The requested amount of \$95,278,000 will be applied as follows:

|                                                                                                                             |                  |
|-----------------------------------------------------------------------------------------------------------------------------|------------------|
| Continue construction of channels, canals, and pumping plants for South Dade County                                         | 6,919,000        |
| Continue construction of channels, canals, levees, floodwalls, and flood control structures for Upper St. Johns River Basin | 2,168,000        |
| Continue construction of levees, floodwalls, pumping plants, and floodway control for West Palm Beach Canal                 | 47,862,000       |
| Continue construction of locks, channels, and canals for Manatee Pass-Through Gates                                         | 1,587,000        |
| Complete the feasibility phase of the Central and Southern Florida Project                                                  | 2,496,000        |
| Engineering and Design for South Dade County                                                                                | 2,609,000        |
| Engineering and Design for West Palm Beach Canal                                                                            | 297,000          |
| Engineering and Design for Manatee Pass-Through Gates                                                                       | 60,000           |
| Engineering and Design for Comprehensive Everglades Restoration Plan                                                        | 27,961,000       |
| Construction Management                                                                                                     | <u>3,319,000</u> |
| Total                                                                                                                       | 95,278,000       |



NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the authorizing legislation and the Water Resources Development Act of 1986 and 1996, as applicable, the non-Federal sponsor must comply with the requirements listed below:

|                                                                                                                                                                                                 | Payments During<br>Construction and<br>Reimbursements | Annual Operation,<br>Maintenance, Repair,<br>Rehabilitation, and<br>Replacement Costs |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|---------------------------------------------------------------------------------------|
| Requirements of local Cooperation                                                                                                                                                               |                                                       |                                                                                       |
| Upper St. Johns River Basin                                                                                                                                                                     |                                                       |                                                                                       |
| Provide lands, easements, rights of way, and dredged material disposal areas.                                                                                                                   | 86,232,000                                            |                                                                                       |
| Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project                                               | 11,060,000                                            |                                                                                       |
| Pay one-half of the separable costs allocated to recreation (except recreational navigation) and bear all costs of operations, maintenance, repair, and replacement of recreational facilities. | <u>3,208,000</u>                                      | <u>82,000</u>                                                                         |
| Total                                                                                                                                                                                           | 100,500,000                                           | 82,000                                                                                |
| West Palm Beach Canal                                                                                                                                                                           |                                                       |                                                                                       |
| Provide lands, easements, rights of way, and dredged material disposal areas.                                                                                                                   | 11,129,000                                            |                                                                                       |
| Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.                                              | 1,400,000                                             |                                                                                       |
| Pay 12.8 percent of the separable costs allocated to flood control and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of facilities.                         | <u>13,271,000</u>                                     | <u>289,800</u>                                                                        |
| Total                                                                                                                                                                                           | 25,800,000                                            | 289,800                                                                               |

| Requirements of local Cooperation (Continued)                                                                                                                                                  | Payments During<br>Construction and<br>Reimbursements | Annual Operation,<br>Maintenance, Repair,<br>Rehabilitation, and<br>Replacement Costs |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|---------------------------------------------------------------------------------------|
| South Dade County                                                                                                                                                                              |                                                       |                                                                                       |
| Provide lands, easements, rights of way, and dredged material disposal areas.                                                                                                                  | 116,452,000                                           |                                                                                       |
| Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.                                             | 330,000                                               |                                                                                       |
| Pay on-half of the cost of the project assigned to flood control and bear all costs of operation, maintenance, repair, rehabilitation, and replacement of flood control facilities.            | <u>24,630,000</u>                                     | <u>845,000</u>                                                                        |
| Total                                                                                                                                                                                          | 141,412,000                                           | 845,000                                                                               |
| Manatee Pass-Through Gates                                                                                                                                                                     |                                                       |                                                                                       |
| Pay applicable percentage based upon authorized cost share for each particular project.                                                                                                        | <u>2,300,000</u>                                      |                                                                                       |
| Total                                                                                                                                                                                          | 2,300,000                                             |                                                                                       |
| Comprehensive Everglades Restoration Plan                                                                                                                                                      |                                                       |                                                                                       |
| Provide lands, easements, rights of way, and dredged material disposal areas.                                                                                                                  | 462,512,000                                           |                                                                                       |
| Modify or relocate utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project.                                             |                                                       |                                                                                       |
| Pay on-half of the cost of the project assigned to flood control and bear one half of the cost of operation, maintenance, repair, rehabilitation, and replacement of flood control facilities. | <u>409,905,000</u>                                    |                                                                                       |
| Total                                                                                                                                                                                          | 872,417,000                                           |                                                                                       |

|                                               | Payments During<br>Construction and<br>Reimbursements | Annual Operation,<br>Maintenance, Repair,<br>Rehabilitation, and<br>Replacement Costs |
|-----------------------------------------------|-------------------------------------------------------|---------------------------------------------------------------------------------------|
| Requirements of local Cooperation (Continued) |                                                       |                                                                                       |
| Completed Works                               | 83,400,000                                            |                                                                                       |
| Unprogrammed Works                            | <u>342,371,000</u>                                    |                                                                                       |
| Total Non-Federal Costs                       | 1,568,200,000                                         |                                                                                       |

The non-Federal sponsor has also agreed to make all required payments concurrently with project construction.

STATUS OF LOCAL COOPERATION: Assurances of local cooperation have been accepted from the local sponsor, the South Florida Water Management District, for all works authorized under the Central and Southern Florida project except for the Upper St. Johns River portion of the project. Local interest voluntarily executed a supplemental assurances contract which was approved by the District Engineer on 1 July 1972 for all modifications to the project. Assurances of local cooperation were accepted from the St. Johns River Water Management District for the Upper St. Johns River portion on 30 December 1987. The Project Cooperation Agreement for the South Dade County separable element was executed with the South Florida Water Management District in January 1995. The Design Agreement for the Comprehensive Everglades Restoration Plan (CERP) was signed on 12 May 2000. Additional Design Agreements for CERP features are scheduled to be executed in FY01 with Seminole Tribe of Florida, Miccosukee Tribe of Florida, Lee County, Florida Department of Environmental Protection, and Miami-Dade County.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal cost estimate of \$2,219,000,000 is an increase of \$109,726,000 over the latest estimate (\$2,109,274,000) submitted to Congress (FY 2001). This change includes the following items:

| Item                                      | Amount             |
|-------------------------------------------|--------------------|
| Price Escalation on Construction Features | \$(132,000,000)    |
| Design Changes                            | 90,200,000         |
| Schedule Changes                          | <u>151,526,000</u> |
| Total                                     | \$109,726,000      |

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The latest Environmental Impact Statement for the project was for the West Palm Beach Canal separable element and was filed with the Environmental Protection Agency in June 1998.

OTHER INFORMATION: Funds to initiate preconstruction planning and construction were appropriated in FY 1950. The Everglades National Park Protection and Expansion Act, signed 13 December 1989, authorizes construction of structural works required for improved water deliveries to Shark River Slough in Everglades national Park, construction of flood protection works for the residential area in the East Everglades, and acquisition of 107,600 acres of privately owned wetlands in the East Everglades. The Department of the Interior and the State of Florida would acquire the land and the Secretary of the Army would construct all project modifications with funds transferred to the Corps of Engineers by the National Park Service for this purpose. All Federal funding for implementation of this project is being appropriated through the Department of Interior appropriations and transfers are made to the Corps of Engineers as needed for modifications to the Central and Southern Florida project. This authorization also included modification of the South Dade County separable element to improve the natural resources in Taylor Slough in Everglades National Park and was funded through the Corps Central and Southern Florida project appropriation.

The Kissimmee Restoration Project was authorized by the Water Resources Development Act of 1992. It is being funded by a separate appropriation. The project cooperation agreement was executed in March 1994. Engineering and design is underway, and construction was initiated in Fiscal Year 97.

The Water Resources Development Act of 1992 authorizes the Chief of Engineers to review the Central and Southern Florida project to determine whether modifications to the existing project are advisable at the present time due to significantly changed physical, biological, demographic, or economic conditions, with particular reference to modifying the project or its operation for improving the quality of the environment, improving protection of the aquifer, and improving the integrity, capability, and conservation of urban water supplies affected by the project or its operation. The central organizing theme of the study is restoration of the Everglades ecosystem while accommodating other demands for water and related land resources in south Florida. Recognizing the complexity of ecological restoration and the extensive interaction between the ecosystem and other uses of water and related land resources, oversight of the reconnaissance study was provided by a South Florida Ecosystem Restoration Task Force, which will continue to provide policy guidance, study coordination, and appropriate agency participation. The Water Resources Development Act of 1996 (Section 528) required that a report be submitted to Congress, along with a Programmatic Environmental Impact Statement, in July 1999. The Final Integrated Feasibility Report and Programmatic Environmental Impact Statement was submitted to Congress on 01 July 1999. The Energy and Water Appropriations Act of FY 2000, Public Law 106-50 authorized funds for the Government to initiate design of elements of the Comprehensive Plan for the Everglades and South Florida Ecosystem Restoration Project.

The Water Resources Development Act of 1996 also legislatively established the Task Force and expanded its membership to include State and local agency representatives. The Task Force, along with the Governor's Commission for the Everglades, is providing assistance to the Comprehensive Everglades Restoration Plan project development team.

The Indian River Lagoon Feasibility Study was initiated in 1996. This study is evaluating potential modifications to the Central and South Florida Project for ecological restoration of Indian River Lagoon system.

The Water Resources Development Act of 2000 authorized the Comprehensive Everglades Restoration Plan as the framework for modifications and operational changes to the Central & Southern Florida Project. In addition, specific authorization was provided for 10 projects totaling \$1.1 billion (including \$100 million for adaptive assessment and monitoring programs) and 4 pilot projects totaling \$69 million, and to allow for implementation of projects under a programmatic authority, not to exceed \$206 million. Two additional pilot projects were authorized in the Water Resources Development Act of 1999 for \$206 million.

SUMMARIZED FINANCIAL DATA:

Upper St. Johns River Basin

|                                                |            |             |
|------------------------------------------------|------------|-------------|
| Estimated Federal Cost                         |            | 94,000,000  |
| Programmed Construction                        | 88,320,000 |             |
| Unprogrammed Construction                      | 5,680,000  |             |
| Estimated Non-Federal Cost                     |            | 100,500,000 |
| Programmed Construction                        | 98,596,000 |             |
| Cash Contributions                             | 1,304,000  |             |
| Other Costs                                    | 97,292,000 |             |
| Estimated Non-Federal Cost                     |            |             |
| Unprogrammed Construction                      | 1,904,000  |             |
| Cash Contributions                             | 1,904,000  |             |
| Other Costs                                    | 0          |             |
| Total Estimated Programmed Construction Cost   |            | 186,916,000 |
| Total Estimated Unprogrammed Construction Cost |            | 7,584,000   |
| Total Estimated Project Cost                   |            | 194,500,000 |

REMAINING BENEFIT-REMAINING COST RATIO: 2.7 to 1 at 6 5/8 percent.

TOTAL BENEFIT-COST RATIO: 3.0 to 1 at 6 5/8 percent.

SUMMARIZED FINANCIAL DATA (Continued):

South Dade County

|                                                |             |             |
|------------------------------------------------|-------------|-------------|
| Estimated Federal Cost                         |             | 141,588,000 |
| Programmed Construction                        | 141,588,000 |             |
| Unprogrammed Construction                      | 0           |             |
| Estimated Non-Federal Cost                     |             | 141,412,000 |
| Programmed Construction                        | 141,412,000 |             |
| Cash Contributions                             | 24,630,000  |             |
| Other Costs                                    | 116,782,000 |             |
| Estimated Non-Federal Cost                     |             |             |
| Unprogrammed Construction                      |             | 0           |
| Cash Contributions                             | 0           |             |
| Other Costs                                    | 0           |             |
| Total Estimated Programmed Construction Cost   |             | 283,000,000 |
| Total Estimated Unprogrammed Construction Cost |             | 0           |
| Total Estimated Project Cost                   |             | 283,000,000 |

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable

SUMMARIZED FINANCIAL DATA (Continued):

West Palm Beach Canal

|                                                |             |             |
|------------------------------------------------|-------------|-------------|
| Estimated Federal Cost (COE)                   |             | 203,700,000 |
| Programmed Construction                        | 203,700,000 |             |
| Unprogrammed Construction                      | 0           |             |
| Estimated Federal Cost (OFA)                   |             | 46,000,000  |
| Programmed Construction                        | 46,000,000  |             |
| Unprogrammed Construction                      | 0           |             |
| Estimated Non-Federal Cost                     |             | 25,800,000  |
| Programmed Construction                        | 25,800,000  |             |
| Cash Contributions                             | 13,271,000  |             |
| Other Costs                                    | 12,529,000  |             |
| Estimated Non-Federal Cost                     |             |             |
| Unprogrammed Construction                      |             | 0           |
| Cash Contributions                             | 0           |             |
| Other Costs                                    | 0           |             |
| Total Estimated Programmed Construction Cost   |             | 275,500,000 |
| Total Estimated Unprogrammed Construction Cost |             | 0           |
| Total Estimated Project Cost                   |             | 275,500,000 |

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable

SUMMARIZED FINANCIAL DATA (Continued):

Manatee Pass-Through Gates

|                                                |           |            |            |
|------------------------------------------------|-----------|------------|------------|
| Estimated Federal Cost                         |           |            | 11,300,000 |
| Programmed Construction                        |           | 11,300,000 |            |
| Unprogrammed Construction                      |           | 0          |            |
| Estimated Non-Federal Cost                     |           |            | 2,300,000  |
| Programmed Construction                        |           | 2,300,000  |            |
| Cash Contributions                             | 2,300,000 |            |            |
| Other Costs                                    | 0         |            |            |
| Estimated Non-Federal Cost                     |           |            |            |
| Unprogrammed Construction                      |           | 0          |            |
| Cash Contributions                             | 0         |            |            |
| Other Costs                                    | 0         |            |            |
| Total Estimated Programmed Construction Cost   |           |            | 13,600,000 |
| Total Estimated Unprogrammed Construction Cost |           |            | 0          |
| Total Estimated Project Cost                   |           |            | 13,600,000 |

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable



SUMMARIZED FINANCIAL DATA (Continued):

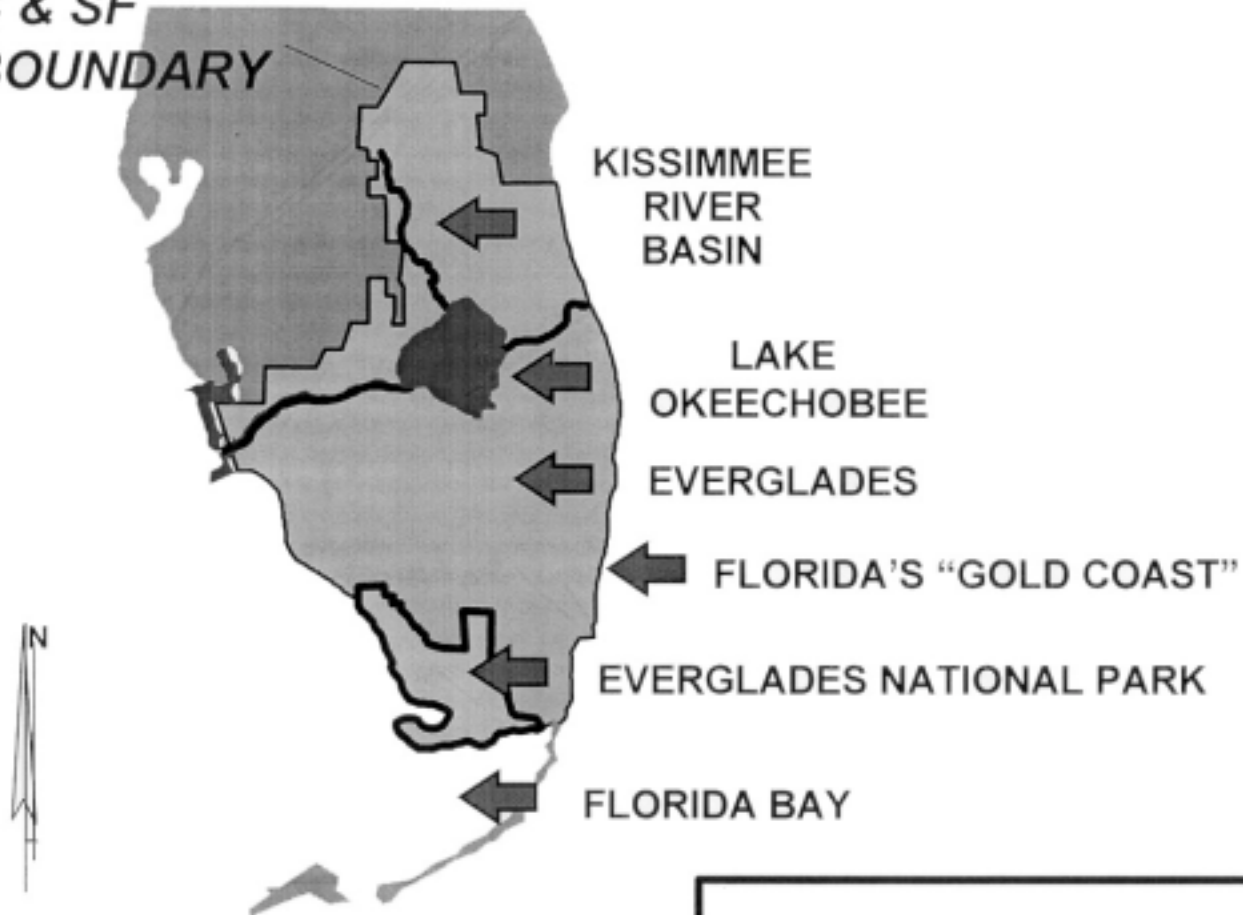
Comprehensive Everglades Restoration Plan

|                                                |             |               |
|------------------------------------------------|-------------|---------------|
| Estimated Federal Cost                         |             | 876,033,000   |
| Programmed Construction                        | 876,033,000 |               |
| Unprogrammed Construction                      | 0           |               |
| Estimated Non-Federal Cost                     |             | 872,417,000   |
| Programmed Construction                        | 872,417,000 |               |
| Cash Contributions                             | 403,395,000 |               |
| Other Costs                                    | 469,022,000 |               |
| Estimated Non-Federal Cost                     |             |               |
| Unprogrammed Construction                      |             | 0             |
| Cash Contributions                             | 0           |               |
| Other Costs                                    | 0           |               |
| Total Estimated Programmed Construction Cost   |             | 1,748,450,000 |
| Total Estimated Unprogrammed Construction Cost |             | 0             |
| Total Estimated Project Cost                   |             | 1,748,450,000 |

REMAINING BENEFIT-REMAINING COST RATIO: Not applicable

TOTAL BENEFIT-COST RATIO: Not applicable

**C & SF  
BOUNDARY**



**CENTRAL AND SOUTHERN  
FLORIDA PROJECT**

APPROPRIATION TITLE: Construction, General - Environmental Restoration

PROJECT: Everglades and South Florida Ecosystem Restoration, FL (Continuing)

LOCATION: The projects will be within the boundaries of the Central and Southern Florida (C&SF) Project including the Everglades, the Florida Keys and the contiguous and near-shore waters of South Florida. The project is located in the southeasterly 18 counties of the State of Florida. Principle areas are the Kissimmee River Basin, Lake Okeechobee-Everglades Area, East Coast-Everglades Area, and Big Cypress Basin.

DESCRIPTION: Critical Restoration Projects must meet the following criteria: be within the C&SF Project and its near shore waters; provide immediate, independent, and substantial ecosystem restoration, protection, and preservation benefits; cost less than \$25 million in Federal funds; be generally consistent with the Governor's Commission's Conceptual Plan; and have a local sponsor to contribute 50% of the total project cost. Projects underway are: Florida Keys Carrying Capacity, East Coast Canal Structures, Tamiami Trail Culverts, Western C-11, Seminole Big Cypress, Southern CREW, Lake Okeechobee Water Retention, 10 Mile Creek, and Lake Trafford.

AUTHORIZATION: Water Resources Development Act of 1996, as modified by the Water Resources Development Act of 1999.

REMAINING BENEFIT - REMAINING COST RATIO: Each project will be justified based on its ecosystem restoration, preservation, or protection benefits.

TOTAL BENEFIT - COST RATIO: Each project will be justified based on its ecosystem restoration, preservation, or protection benefits.

INITIAL BENEFIT - COST RATIO: Each project will be justified based on its ecosystem restoration, preservation, or protection benefits.

BASIS OF BENEFIT - COST RATIO: Each project will be justified based on its ecosystem restoration, preservation, or protection benefits.

| SUMMARIZED FINANCIAL DATA                      |             | ACCUM.<br>PCT OF<br>EST FED<br>COST | STATUS<br>(1 Jan 2001) | PERCENT<br>COMPLETE | PHYSICAL<br>COMPLETION<br>SCHEDULE |
|------------------------------------------------|-------------|-------------------------------------|------------------------|---------------------|------------------------------------|
| Estimate Federal Cost                          | 75,000,000  |                                     | Total Project          | 9                   | Being Determined                   |
| Estimated Non-Federal Cost                     | 73,968,000  |                                     |                        |                     |                                    |
| Cash Contributions                             | 49,601,000  |                                     |                        |                     |                                    |
| Other Costs                                    | 24,367,000  |                                     |                        |                     |                                    |
| Total Estimated Project Cost                   | 148,968,000 |                                     |                        |                     |                                    |
| Allocations to 30 September 2000               | 11,254,000  |                                     |                        |                     |                                    |
| Conference Allowance for FY 2001               | 20,525,000  | 1/                                  |                        |                     |                                    |
| Allocation for FY 2001                         | 8,201,000   |                                     |                        |                     |                                    |
| Allocations through FY 2001                    | 19,455,000  | 31%                                 |                        |                     |                                    |
| Allocation Requested for FY 2002               | 19,876,000  | 52%                                 |                        |                     |                                    |
| Programmed Balance to Complete after FY 2002   | 35,669,000  |                                     |                        |                     |                                    |
| Unprogrammed Balance to Complete after FY 2002 | 0           |                                     |                        |                     |                                    |

1/ Reflects \$3,284,000 reduction assigned as savings and slippage, \$40,000 rescinded in accordance with the Consolidated Appropriation Act, 2001 and \$9,000,000 reprogrammed from the project..

PHYSICAL DATA)  
Pumping Plants (Number) 3

JUSTIFICATION: The C&SF Project has successfully provided flood control, water supply benefits, recreation, and navigation in accordance with its authorized purposes. However, there has been substantial degradation in the region's natural resources associated with the water management system. Furthermore, development in the project area has far surpassed projections in the initial design of the comprehensive plan for the C&SF Project in 1948. WRDA 1996 authorized implementation of Critical Projects that will provide immediate, independent, and substantial ecosystem restoration, protection and preservation benefits. The projects will be justified on the basis of those benefits.

Division: South Atlantic

District: Jacksonville

Everglades and South Florida Ecosystem Restoration, FL

3 April 2001

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FISCAL YEAR 2002: The requested amount of \$19,876 will be applied as follows:

|                                              |                  |
|----------------------------------------------|------------------|
| Initiate construction of channels and canals | \$ 5,303,000     |
| Initiate construction of reservoirs          | 7,501,000        |
| Land Reimbursement                           | 5,211,000        |
| Planning, Engineering and Design             | 854,000          |
| Construction Management                      | <u>1,007,000</u> |
| Total                                        | 19,876,000       |

NON-FEDERAL COST: The Non-Federal project sponsor(s) will provide at least 50% of the total project cost. The Non-Federal contribution can be through in-kind services, cash contributions, or any combination that is approved in the Project Cooperation Agreement.

STATUS OF LOCAL COOPERATION: PCA's executed 07 January 2000 for East Coast Canal Structures, Tamiami Trail Culverts, Western C-11, Seminole Big Cypress, Southern Crew, Lake Okeechobee Water Retention, 10-Mile Creek, and Lake Trafford. PCA executed Dec 1998 for Florida Keys Carrying Capacity. Local sponsors include: South Florida Water Management District (SFWMD), Seminole Tribe of Florida, and the Department of Community Affairs (DCA).

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal (Corps) cost estimate of \$75,000,000 is an increase of \$208,000 from the latest estimate (\$74,792,000) submitted to Congress (FY2001). This change includes:

|                |                  |
|----------------|------------------|
| Design changes | <u>\$208,000</u> |
| Total          | 208,000          |

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: Appropriate NEPA documents were prepared and finalized prior to execution of the PCA.

OTHER INFORMATION: None

SUMMARIZED FINANCIAL DATA.

Lake Okeechobee

|                              |           |            |
|------------------------------|-----------|------------|
| Estimated Federal Cost       |           | 8,180,000  |
| Estimated Non-Federal Cost   |           | 8,180,000  |
| Cash Contributions           | 1,080,000 |            |
| Other Costs                  | 7,100,000 |            |
| Total Estimated Project Cost |           | 16,360,000 |

Southern CREW

|                              |           |            |
|------------------------------|-----------|------------|
| Estimated Federal Cost       |           | 6,010,000  |
| Estimated Non-Federal Cost   |           | 6,011,000  |
| Cash Contributions           | 5,661,000 |            |
| Other Costs                  | 350,000   |            |
| Total Estimated Project Cost |           | 12,021,000 |

East Coast Canal Structures

|                              |         |           |
|------------------------------|---------|-----------|
| Estimated Federal Cost       |         | 1,108,000 |
| Estimated Non-Federal Cost   |         | 1,109,000 |
| Cash Contributions           | 884,000 |           |
| Other Costs                  | 225,000 |           |
| Total Estimated Project Cost |         | 2,217,000 |

SUMMARIZED FINANCIAL DATA (Continued):

Western C-11 Basin

|                              |           |            |
|------------------------------|-----------|------------|
| Estimated Federal Cost       |           | 6,071,000  |
| Estimated Non-Federal Cost   |           | 6,070,000  |
| Cash Contributions           | 5,795,000 |            |
| Other Costs                  | 275,000   |            |
| Total Estimated Project Cost |           | 12,141,000 |

Seminole Big Cypress

|                              |            |            |
|------------------------------|------------|------------|
| Estimated Federal Cost       |            | 22,121,000 |
| Estimated Non-Federal Cost   |            | 22,127,000 |
| Cash Contributions           | 14,610,000 |            |
| Other Costs                  | 7,517,000  |            |
| Total Estimated Project Cost |            | 44,248,000 |

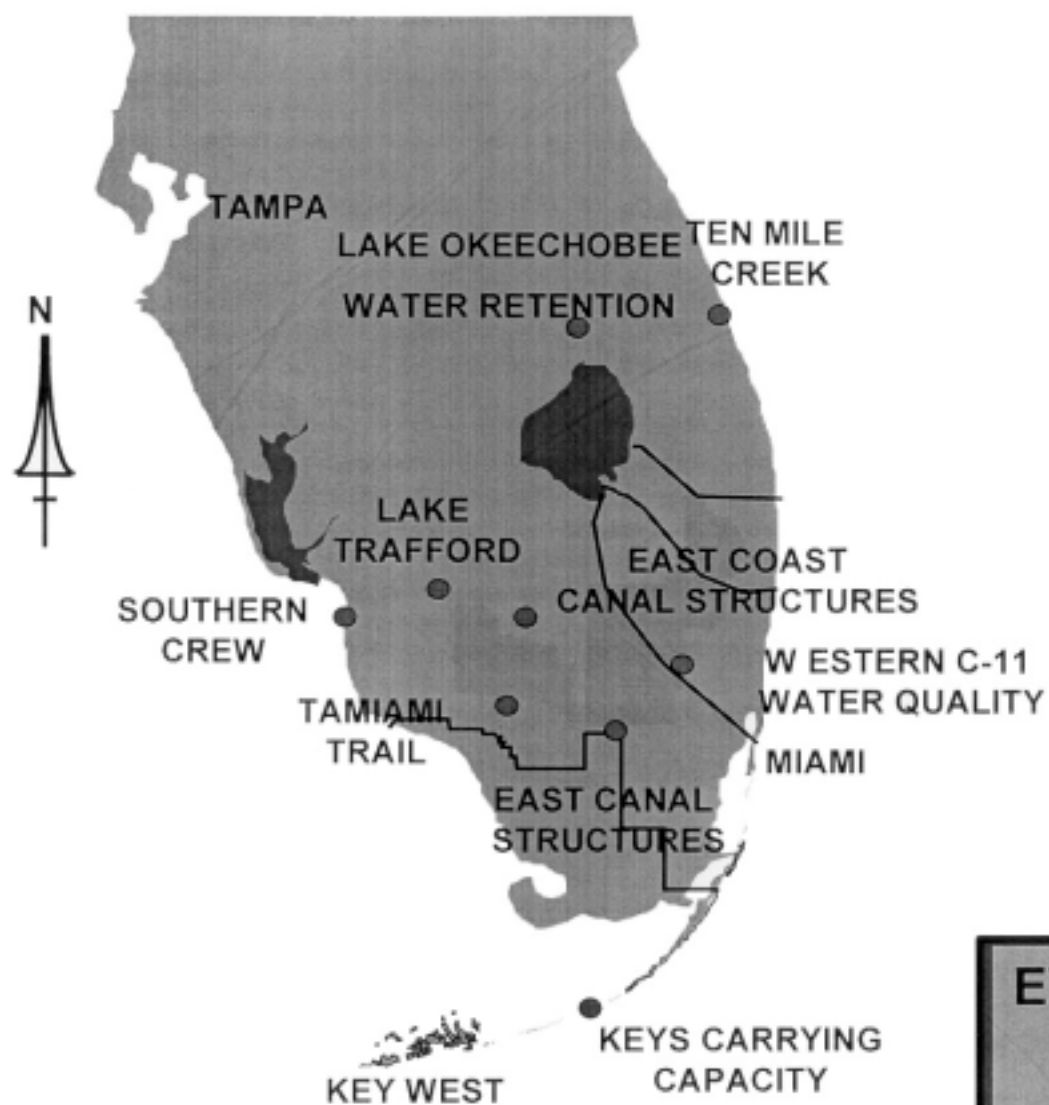
Ten-Mile Creek

|                              |           |            |
|------------------------------|-----------|------------|
| Estimated Federal Cost       |           | 14,533,000 |
| Estimated Non-Federal Cost   |           | 14,533,000 |
| Cash Contributions           | 9,358,000 |            |
| Other Costs                  | 5,175,000 |            |
| Total Estimated Project Cost |           | 29,066,000 |

SUMMARIZED FINANCIAL DATA (Continued):

|                              |           |            |
|------------------------------|-----------|------------|
| Tamiami Trail                |           |            |
| Estimated Federal Cost       |           | 4,168,000  |
| Estimated Non-Federal Cost   |           | 4,168,000  |
| Cash Contributions           | 3,943,000 |            |
| Other Costs                  | 225,000   |            |
| Total Estimated Project Cost |           | 8,336,000  |
| Lake Trafford                |           |            |
| Estimated Federal Cost       |           | 8,770,000  |
| Estimated Non-Federal Cost   |           | 8,770,000  |
| Cash Contributions           | 6,770,000 |            |
| Other Costs                  | 2,000,000 |            |
| Total Estimated Project Cost |           | 17,540,000 |
| Keys Carrying Capacity       |           |            |
| Estimated Federal Cost       |           | 3,000,000  |
| Estimated Non-Federal Cost   |           | 3,000,000  |
| Cash Contributions           | 1,500,000 |            |
| Other Costs                  | 1,500,000 |            |
| Total Estimated Project Cost |           | 6,000,000  |





## EVERGLADES ECOSYSTEM RESTORATION, FLORIDA

APPROPRIATION TITLE: Construction, General - Local Protection

PROJECT: Kissimmee River, Florida (Continuing)

LOCATION: The Kissimmee River basin is approximately 3,000 square miles in size. It stretches from the southern Orlando area southward to Lake Okeechobee in central Florida. The project to restore the Kissimmee River has two component parts; the upper basin, referred to as the Headwaters Revitalization, and the lower basin, referred to as the Kissimmee River Restoration. The project was authorized in the Water Resources Development Acts of 1988 and 1992.

DESCRIPTION: The upper basin portion of the project consists of water regulation schedule modifications, canal and structure improvements, and land acquisition. This will result in environmental benefits in the upper chain of lakes and in the lower basin. More natural fluctuations of water levels will enhance the peripheral marshes of the lakes. Reestablishing a more natural timing of flows to the lower basin will result in restoration or enhancement of the Kissimmee River ecosystem. Structural improvements will include enlargements of existing canals and existing water control structures. The Kissimmee River project is addressing restoration of natural flooding of the floodplain to reestablish historic wetland conditions. Construction will include backfilling approximately 22 miles of the C-38 canal, excavating approximately 9 miles of new river channel, and the removing 2 water control structures and locks in the backfilled sections. The project will also include acquisition of fee title for lands within the 5-year-floodplain and acquisition of flowage easements for lands between the five-year-flood line and the 100-year-flood line.

AUTHORIZATION: Water Resources Development Acts of 1988 (Section 46) and 1992 (Section 101).

REMAINING BENEFIT - REMAINING COST RATIO: Not applicable

TOTAL BENEFIT - COST RATIO: Not applicable

INITIAL BENEFIT - COST RATIO: Not applicable

BASIS OF BENEFIT - COST RATIO: Not applicable

| SUMMARIZED FINANCIAL DATA                      |             | ACCUM.<br>PCT. OF<br>EST FED<br>COST | STATUS<br>(1Jan 2001)    | PERCENT<br>COMPLETE | PHYSICAL<br>COMPLETION<br>SCHEDULE |
|------------------------------------------------|-------------|--------------------------------------|--------------------------|---------------------|------------------------------------|
| Estimated Federal Cost                         | 265,600,000 |                                      | Lands and Damages        | 42                  | Sep 2001                           |
|                                                |             |                                      | Relocations - Bridges    | 0                   | Being determined                   |
|                                                |             |                                      | Channels and Canals      | 8                   | Being determined                   |
| Estimated Non-Federal Cost                     | 265,600,000 |                                      | Flood Control Structures | 29                  | Being determined                   |
|                                                |             |                                      | Entire Project           | 24                  | Being determined                   |
| Cash Contributions                             | 73,412,000  |                                      |                          |                     |                                    |
| Other Costs                                    | 192,188,000 |                                      |                          |                     |                                    |
| Total Estimated Project Cost                   | 531,200,000 |                                      |                          |                     |                                    |
| Allocations to 30 September 2000               | 65,771,000  |                                      |                          |                     |                                    |
| Conference Allowance for FY 2001               | 20,000,000  |                                      |                          |                     |                                    |
| Allocation for FY 2001                         | 26,761,000  | 1/                                   |                          |                     |                                    |
| Allocations through FY 2001                    | 92,532,000  | 35%                                  |                          |                     |                                    |
| Allocation Requested for FY 2002               | 25,846,000  | 45%                                  |                          |                     |                                    |
| Programmed Balance to Complete After FY 2002   | 147,222,000 |                                      |                          |                     |                                    |
| Unprogrammed Balance to Complete After FY 2002 | 0           |                                      |                          |                     |                                    |

1/ Reflects \$3,200,000 reduction assigned as savings and slippage, \$10,000,000 reprogrammed to the project, and \$39,000 rescinded in accordance with the Consolidated Appropriation Act, 2001.

# PHYSICAL DATA

|                                  |    |
|----------------------------------|----|
| Relocations - (Bridges)          | 2  |
| Canals - Miles Backfilled        | 22 |
| Canals - New River Channel       | 9  |
| Water Control Structures Removal | 2  |

JUSTIFICATION: Local water resource development of the Kissimmee River began in the late 1800's. In the 1960's, the river was channelized as part of the comprehensive Central and Southern Florida Project. Although the project has provided continuing navigation and effective flood control, it also resulted in long-term degradation of the natural ecosystem. The 103 mile river that historically meandered across and inundated about 35,000 acres of wetlands over a broad flood plain was reduced to a 56 mile canal that has successfully contained almost all flows since its completion. The channelization coupled with the modifications of the Lower Basin tributary watersheds and efficient control of flood waters and regulation of inflows from the Upper Basin significantly altered hydrologic characteristics of the ecosystem.

Project formulation and scoping was not based on traditional economic benefit-cost analyses and net benefit optimization; rather the plan was based on the most cost effective plan which would meet fish and wildlife resources objectives for restoring ecological integrity. As a result, project construction will result in the restoration of 52 miles of river; 27,000 acres of wetlands; improved water quality characteristics for the Kissimmee River; and restored conditions for over 300 fish and wildlife species.

FISCAL YEAR 2002: The requested amount of \$25,846,000 will be applied as follows:

|                                                                            |                  |
|----------------------------------------------------------------------------|------------------|
| Continue construction of channels, canals, and floodway control structures | \$ 16,412,000    |
| Planning, Engineering, and Design/Monitoring                               | 7,250,000        |
| Construction Management                                                    | <u>2,184,000</u> |
| Total                                                                      | 25,846,000       |

NON-FEDERAL COST: In accordance with the cost sharing and financing concepts reflected in the authorizing legislation, the non-Federal sponsor must comply with the requirements listed below.

| Requirements of Local Cooperation                                                                                                                                                                                         | Payments During Construction, and Reimbursements | Annual Operation, Maintenance, Repair Rehabilitation, and Replacement Costs |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|-----------------------------------------------------------------------------|
| Provide; with credit toward the non-Federal 50 percent share of project costs;all lands, easements, rights of way, and excavated or dredged material disposal areas.                                                      | \$ 178,717,000                                   |                                                                             |
| Modify or relocate; with credit toward the non-Federal 50 percent share of project costs; utilities, roads, bridges (except railroad bridges), and other facilities, where necessary for the construction of the project. | 18,988,000                                       |                                                                             |
| Pay 50 percent of the costs allocated to environmental restoration, and pay all costs of operation, maintenance, repair, rehabilitation, and replacement.                                                                 | <u>67,895,000</u>                                |                                                                             |
| Total Non-Federal Costs                                                                                                                                                                                                   | 265,600,000                                      |                                                                             |

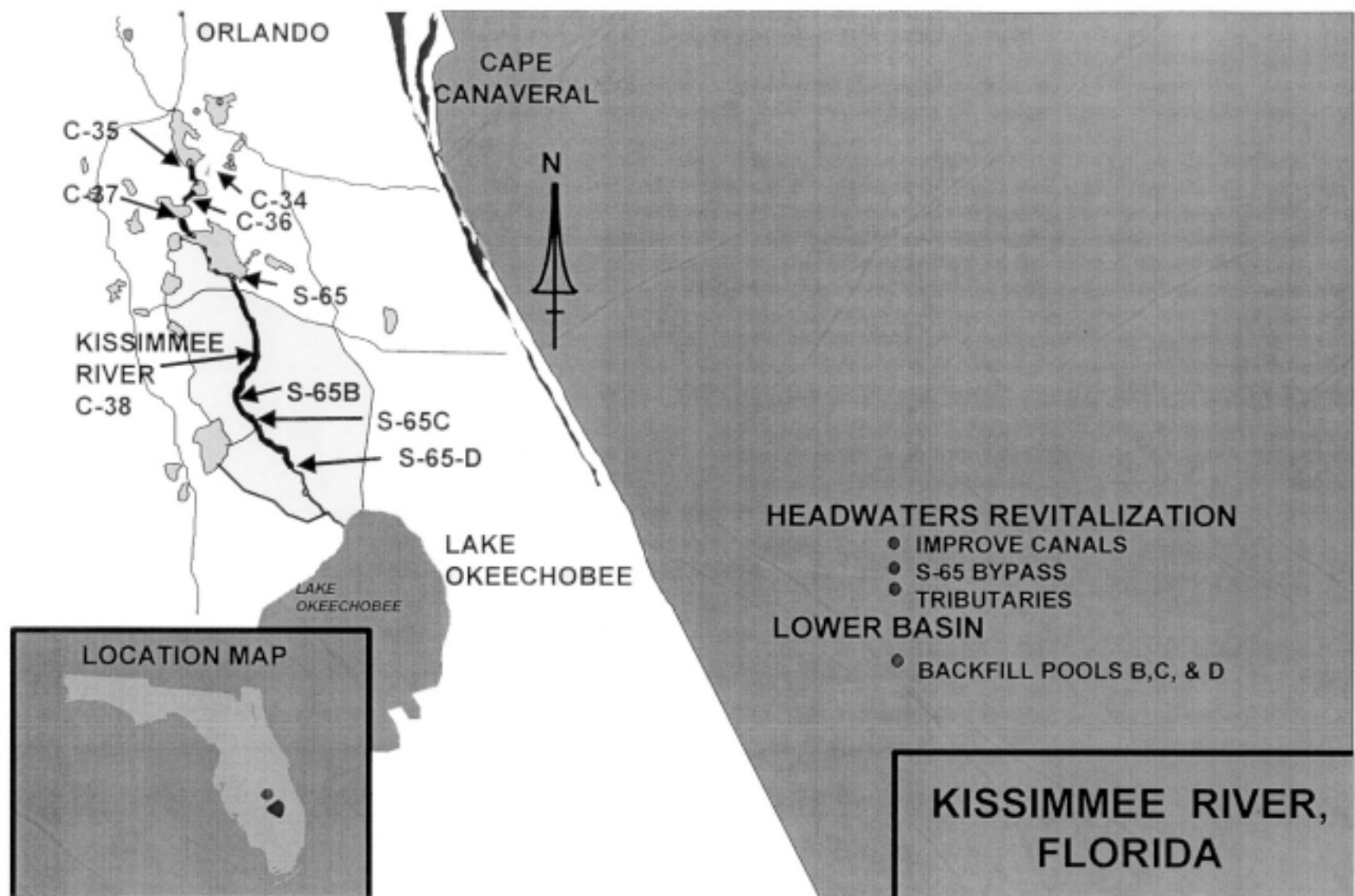
STATUS OF LOCAL COOPERATION: A Project Cooperation Agreement reflecting the cost sharing outlined in House Document 102-286 dated April 7, 1992 was executed with the South Florida Water Management District (SFWMD) in March 1994. The local sponsor will be required to provide a cash contribution of 11.4% (reflecting credit for lands, easements, rights of way, relocations, and disposal areas) of construction costs. A schedule has been developed for cash contributions which takes into account the value of the local sponsor's investment in lands and relocations, thus requiring the initial local sponsor cash contribution in Fiscal Year 2004 for expenditure in Fiscal Year 2005.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps) cost estimate of \$265,600,000 is an increase of \$40,800,000 from the latest estimate (\$224,800,000) submitted to Congress (FY 2001). This change includes the following items.

| Item                                                                             | Amount            |
|----------------------------------------------------------------------------------|-------------------|
| Price Escalation on Construction Features                                        | \$(80,087,000)    |
| Post Contract Award and Other Estimating Adjustments (including contingency adj) | 42,314,000        |
| Schedule Changes                                                                 | 52,973,000        |
| Authorized Modification                                                          | <u>25,600,000</u> |
| Total                                                                            | \$ 40,800,000     |

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: The final Environmental Impact Statement was filed with CEQ on April 5, 1992. A supplement to the Environmental Impact Statement was integrated into the Upper Basin project modification report.

OTHER INFORMATION: Funds to initiate preconstruction planning were allocated in Fiscal Year 1992. Funds to initiate construction were allocated in Fiscal Year 1997.



APPROPRIATION: Construction, General - Multipurpose Project

PROJECT: Walter F. George Powerhouse and Dam, AL and GA (Major Rehabilitation) (Continuing)

LOCATION: Walter F. George Lock and Dam is located at mile 181.5 on the Chattahoochee River, 50 miles south of Columbus, Georgia, and about 84 miles southeast of Montgomery, AL. The navigation lock and gated spillway are located on the right bank of the river. The powerhouse is on the left bank, across the river from the lock, adjacent to the gated spillway.

DESCRIPTION: The plan of improvement is to construct a concrete, cutoff wall upstream of the dam (powerhouse and spillway sections).

AUTHORIZATION: Section 2 of the River and Harbor Act of 1945, further modified by the River and Harbor Act of 1946.

REMAINING BENEFIT-REMAINING COST RATIO: 2.2 to 1 at 7 1/8 percent

TOTAL BENEFIT-COST RATIO: 2.1 to 1 at 7 1/8 percent.

INITIAL BENEFIT-COST RATIO: 2.5 to 1 at 7 1/8 percent (FY 2000)

BASIS OF BENEFIT-COST RATIO: Benefits are from the Major Rehabilitation Evaluation Report - Prevention of Potential Structural Failure approved in July 1997 at October 1996 price levels.



| SUMMARIZED FINANCIAL DATA                      |              |  |              | ACCUM<br>PCT OF EST<br>FED COST | STATUS<br>(1 Jan 2001) | PERCENT<br>COMPLETE | PHYSICAL<br>COMPLETION<br>SCHEDULE |
|------------------------------------------------|--------------|--|--------------|---------------------------------|------------------------|---------------------|------------------------------------|
| Estimated Total Appropriation Requirement      |              |  |              | \$43,700,000                    | Entire Project         | 0                   | Being determined                   |
| Future Non-Federal Reimbursement               |              |  |              | 24,358,380                      |                        |                     |                                    |
| Estimated Federal Cost (Ultimate)              |              |  |              | 19,341,620                      |                        |                     |                                    |
| Estimated Non-Federal Cost                     |              |  |              | 24,358,380                      |                        |                     |                                    |
| Cash Contributions                             |              |  | \$ 0         |                                 |                        |                     |                                    |
| Other Costs                                    |              |  | \$ 0         |                                 |                        |                     |                                    |
| Reimbursements                                 |              |  | \$24,358,380 |                                 |                        |                     |                                    |
| Power                                          | \$24,358,380 |  |              |                                 |                        |                     |                                    |
| Total Estimated Project Cost                   |              |  |              | 43,700,000                      |                        |                     |                                    |
| Allocations to 30 September 2000               |              |  |              | 743,000                         |                        |                     |                                    |
| Conference Allowance for FY 2001               |              |  |              | 3,000,000                       |                        |                     |                                    |
| Allocation for FY 2001                         |              |  |              | 614,000                         | 1/                     |                     |                                    |
| Allocation through FY 2001                     |              |  |              | 1,357,000                       |                        | 3                   |                                    |
| Allocation Requested for FY 2002               |              |  |              | 12,325,000                      |                        | 28                  |                                    |
| Programmed Balance to Complete After FY 2002   |              |  |              | 30,018,000                      |                        | 100                 |                                    |
| Unprogrammed Balance to Complete after FY 2002 |              |  |              | 0                               |                        |                     |                                    |

1/ Reflects \$480,000 reduction assigned as savings and slippage, \$1,900,000 reprogrammed from the project, and \$5,000 rescinded in accordance with the Consolidated Appropriations Act, 2001.

PHYSICAL DATA: Construct a 2040-linear foot, concrete, cutoff wall upstream of the dam (powerhouse and spillway).

JUSTIFICATION: The Walter F. George Project has a chronic underground seepage problem which could impact the integrity of the dam (powerhouse and spillway). Numerous attempts to plug up the sinkholes as they appear using Operation and Maintenance funds have been unsuccessful or marginally successful. The potential for structural failure requires the construction of the cutoff wall to prevent further undermining and failure of the project structures. Average annual benefits are as follows:

| Annual Benefits | Amount       |
|-----------------|--------------|
| Non-recreation  | \$ 3,675,000 |
| Recreation      | \$ 4,604,000 |
| Total           | \$ 8,279,000 |

FISCAL YEAR 2002: The requested amount will be applied as follows:

|                                |                |
|--------------------------------|----------------|
| Continue Construction          | \$11,570,000   |
| Planning, Engineering & Design | 56,000         |
| Construction Management        | <u>699,000</u> |
| Total                          | 12,325,000     |

NON-FEDERAL COST: The costs allocable to power are reimbursable, and will be reviewed and adjusted based on construction costs when the project becomes operational.

|                                   | Payments<br>During<br>Construction<br>And<br>Reimbursements | Annual<br>Operation,<br>Maintenance,<br>and<br>Replacement<br>Costs |
|-----------------------------------|-------------------------------------------------------------|---------------------------------------------------------------------|
| Requirements of Local Cooperation |                                                             |                                                                     |
| Capital Cost allocated to power   | \$24,358,380                                                | \$ 0                                                                |
| Total Non-Federal Costs           | \$24,358,380                                                | \$ 0                                                                |

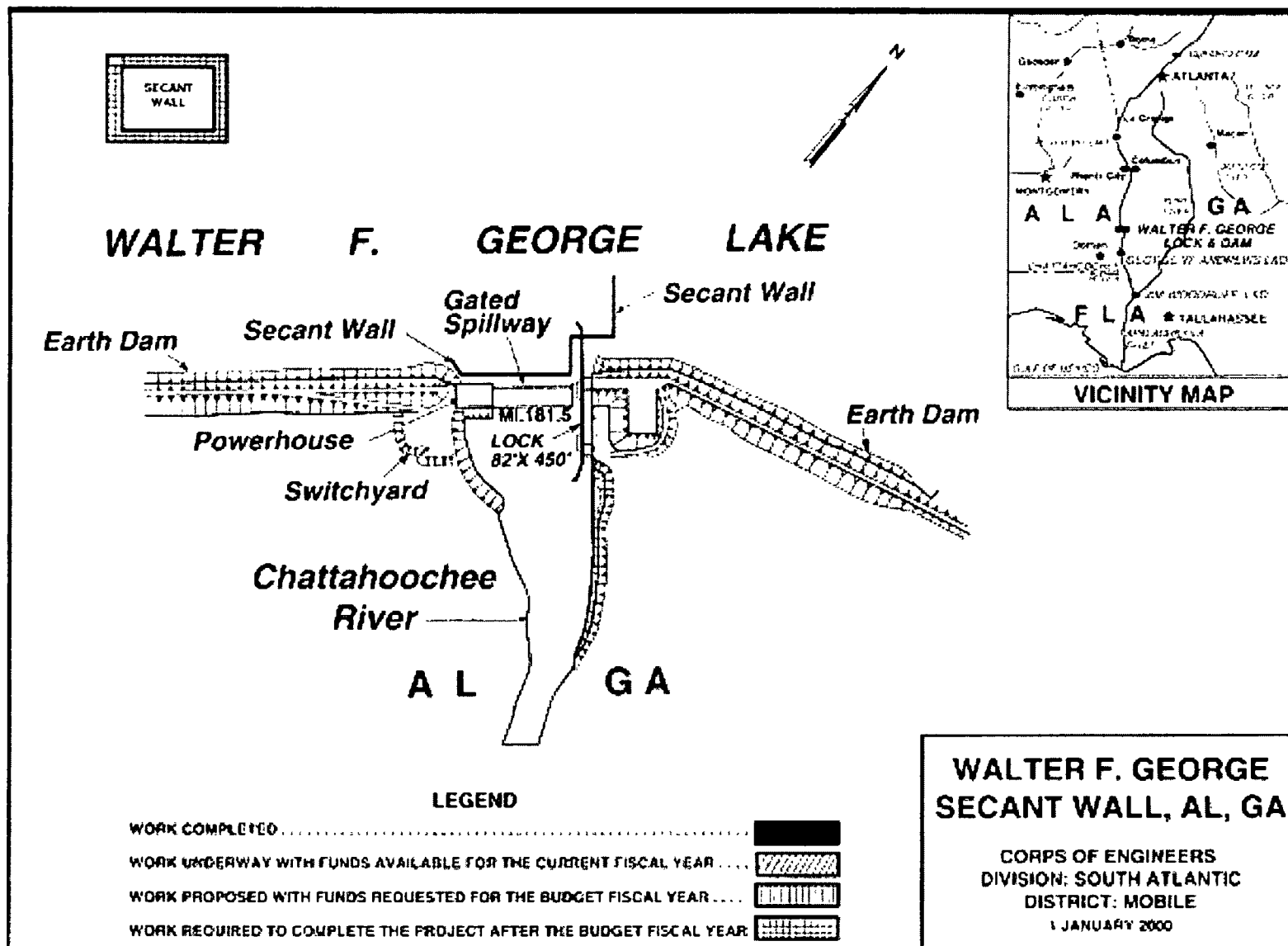
STATUS OF LOCAL COOPERATION . Responsibility for repayment of hydropower costs rests with the Southeastern Power Administration pursuant to Federal law.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal (Corps) cost estimate of \$43,700,000 is an increase of \$5,000,000 from the latest estimate (\$38,700,000) presented to Congress (FY 2001). This change includes the following items.

| Item                                                 | Amount           |
|------------------------------------------------------|------------------|
| Price Escalation on Construction Features            | \$ 610,000       |
| Post Contract Award and Other Estimating Adjustments | <u>4,390,000</u> |
| Total                                                | 5,000,000        |

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An Environmental Assessment (EA) was prepared which addressed the expected impacts of the recommended alternative as well as other potential alternatives under consideration. The EA concluded with a Finding of No Significant Impact (FONSI). The EA and FONSI were fully coordinated with the public and State and Federal agencies. The commenting agencies/public concurred with the FONSI for the recommended alternative discussed in the environmental documentation. Agency/public comments were then incorporated into the final EA and FONSI, which were signed on 7 March 1997. To provide for a wider review of the document, an additional 30 day comment period was afforded the public (via legal notices placed in local newspapers) starting on 17 March and ending on 18 April 1997. No comments were received during this period.

OTHER INFORMATION: Funds to initiate construction were appropriated in FY 1999.



Division: South Atlantic

District: Mobile

Walter F. George Powerhouse and Dam, AL & GA

3 April 2001

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APPROPRIATION: Construction, General - Multiple Purpose Power

PROJECT: Walter F. George Powerplant, AL & GA (Major Rehabilitation), (Continuing)

LOCATION Walter F. George Lock and Dam is located at mile 181.5 on the Chattahoochee River, 50 miles south of Columbus, Georgia, and about 84 miles southeast of Montgomery, AL. The navigation lock and gated spillway are located on the right bank of the river. The powerhouse is on the left bank, across the river from the lock, adjacent to the gated spillway.

DESCRIPTION: The plan of improvement is to refurbish the four turbines, replace exciters with solid state (static) exciters and rewind the four generators.

AUTHORIZATION: Section 2 of the River and Harbor Act of 1945, further modified by the River and Harbor Act of 1946.

REMAINING BENEFIT-REMAINING COST RATIO: 1.2 to 1 at 7 3/4 percent.

TOTAL BENEFIT-COST RATIO: 1.01 to 1 at 7 3/4 percent.

INITIAL BENEFIT-COST RATIO: 1.3 to 1 at 7 3/4 percent (FY 1997).

BASIS OF BENEFIT-COST RATIO: Benefits are from the Major Rehabilitation Evaluation Report approved in August 1995 at October 1994 price levels.

| SUMMARIZED FINANCIAL DATA                      |              | ACCUM<br>PCT OF EST<br>FED COST | STATUS<br>(1 Jan 2001) | PERCENT<br>COMPLETE | PHYSICAL<br>COMPLETION<br>SCHEDULE |
|------------------------------------------------|--------------|---------------------------------|------------------------|---------------------|------------------------------------|
| Estimated Total Appropriation Requirement      |              | \$31,200,000                    | Entire Project         | 16                  | Being determined                   |
| Future Non-Federal Reimbursement               |              | 31,200,000                      |                        |                     |                                    |
| Estimated Federal Cost (Ultimate)              |              | 0                               |                        |                     |                                    |
| Estimated Non-Federal Cost                     |              | 31,200,000                      |                        |                     |                                    |
| Cash Contributions                             | \$ 0         |                                 |                        |                     |                                    |
| Other Costs                                    | 0            |                                 |                        |                     |                                    |
| Reimbursements                                 | 31,200,000   |                                 |                        |                     |                                    |
| Power                                          | \$31,200,000 |                                 |                        |                     |                                    |
| Total Estimated Project Cost                   |              | 31,200,000                      |                        |                     |                                    |
| Allocations to 30 September 2000               |              | 5,328,000                       |                        |                     |                                    |
| Conference Allowance for FY 2001               |              | 2,495,000                       |                        |                     |                                    |
| Allocation for FY 2001                         |              | 2,095,000                       | 1/                     |                     |                                    |
| Allocation through FY 2001                     |              | 7,423,000                       | 24                     |                     |                                    |
| Allocation Requested for FY 2002               |              | 3,000,000                       | 33                     |                     |                                    |
| Programmed Balance to Complete After FY 2002   |              | 20,777,000                      | 100                    |                     |                                    |
| Unprogrammed Balance to Complete after FY 2002 |              | 0                               |                        |                     |                                    |

1/ Reflects \$400,000 reduction assigned as savings and slippage and \$5,000 rescinded accordance with the Consolidated Appropriations Act, 2001.

#### PHYSICAL DATA:

- Rewind 4 generators
- Replace exciters for 4 generators
- Refurbish 4 turbines

JUSTIFICATION: The Walter F. George Powerhouse has experienced notable wear and deterioration levels since the early 1970's. The reliability has degraded faster than expected because of increased recurring cavitation problems as well as partial failure of generator coils as they approach 31 years of their 35-year life expectancy. Engineering analysis shows that these problems along with increasing generating outages can be expected to continue into the future. The result of these increased outages, as well as the reduced plant efficiencies, will be increased operation and maintenance costs, increased production costs and loss of generating revenues to the treasury. Average annual benefits for the major rehabilitation project are \$3,051,000.

Division: South Atlantic

District: Mobile

Walter F. George Powerplant, AL & GA

3 April 2001

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FISCAL YEAR 2002: The requested amount will be applied as follows:

|                                 |                  |
|---------------------------------|------------------|
| Continue Construction           | \$ 2,630,000     |
| Planning, Engineering, & Design | 185,000          |
| Construction Management         | <u>185,000</u>   |
| <br>TOTAL                       | <br>\$ 3,000,000 |

NON-FEDERAL COST: The costs allocable to power are reimbursable, and will be reviewed and adjusted based on construction costs when the project becomes operational.

|                                   | Payments<br>During<br>Construction<br>and<br>Reimbursements | Annual,<br>Operation,<br>Maintenance,<br>and<br>Replacement<br>Costs |
|-----------------------------------|-------------------------------------------------------------|----------------------------------------------------------------------|
| Requirements of Local Cooperation |                                                             |                                                                      |
| Capital Cost allocated to power   | \$31,200,000                                                | \$ 0                                                                 |
| Total Non-Federal Costs           | \$31,200,000                                                | \$ 0                                                                 |

STATUS OF LOCAL COOPERATION: Responsibility for repayment of hydropower costs rests with Southeastern Power Administration pursuant to Federal law.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal (Corps) cost estimate of \$31,200,000 is the same as the latest estimate (\$31,200,000) presented to Congress (FY 2001).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An Environmental Assessment (EA) was prepared which addressed the expected impacts of the recommended alternative as well as other potential alternatives under consideration. The EA concluded with a Finding of No Significant Impact (FONSI). The EA and FONSI were fully coordinated with the public and State and Federal agencies. The commenting agencies concurred with the FONSI for the recommended alternative discussed in the environmental documentation. Agency comments were then incorporated into the final EA and FONSI, signed on 1 March 1995.

OTHER INFORMATION: Funds to initiate construction were appropriated in Fiscal Year 1997. Walter F. George has a chronic underground seepage problem which could impact the integrity of the dam and powerhouse. Numerous attempts over the last few years to solve the problem using O&M funds have been unsuccessful. A major rehabilitation report was prepared which included a detailed analysis of alternatives developed by a panel of independent consultants. Recommendations resulted in a separate major rehabilitation project.

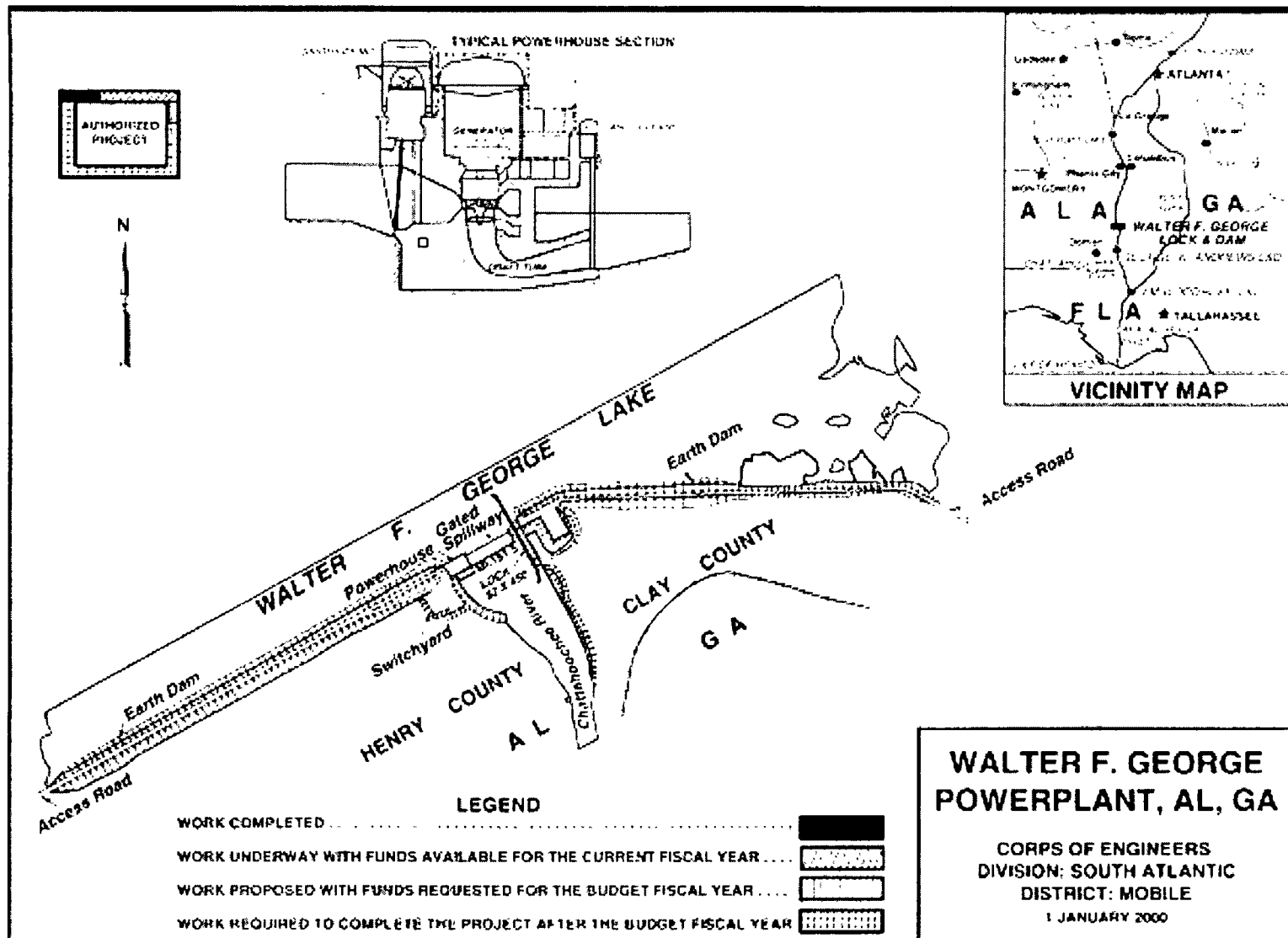
Division: South Atlantic

District: Mobile

Walter F. George Powerplant, AL & GA

3 April 2001

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Division: South Atlantic

District: Mobile

Walter F. George Powerplant, AL & GA

3 April 2001

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APPROPRIATION: Construction, General - Multiple Purpose Power

PROJECT. Jim Woodruff Powerhouse, FL & GA (Major Rehabilitation) (Continuing)

LOCATION: Jim Woodruff Lock and Dam is located at mile 106.4 on the Apalachicola River, 37 miles northwest of Tallahassee, Florida, in Jackson and Gadsden Counties, Florida. The navigation lock and fixed crest spillway are located on the right bank of the river. The powerhouse is on the left bank, across the river from the lock, adjacent to the gated spillway.

DESCRIPTION: The plan of improvement is to replace the three turbines and rewind the three generators. The plan also includes the replacement of several peripheral electrical components, most notably the transformers.

AUTHORIZATION: Section 2 of the River and Harbor Act of 1945, further modified by the River and Harbor Act of 1946.

REMAINING BENEFIT-REMAINING COST RATIO: 3.3 to 1 at 8 percent.

TOTAL BENEFIT-COST RATIO: 1.3 to 1 at 8 percent.

INITIAL BENEFIT-COST RATIO: 1.4 to 1 at 8 percent (FY 1996).

BASIS OF BENEFIT-COST RATIO: Benefits are from the Major Rehabilitation Evaluation Report approved in August 1993 at October 1993 price levels.

| SUMMARIZED FINANCIAL DATA                      |              |       |            | ACCUM<br>PCT OF EST<br>FED COST | STATUS<br>(1 Jan 2001) | PERCENT<br>COMPLETE | PHYSICAL<br>COMPLETION<br>SCHEDULE |
|------------------------------------------------|--------------|-------|------------|---------------------------------|------------------------|---------------------|------------------------------------|
|                                                |              |       |            | \$29,800,000                    | Entire Project         | 61                  | Being determined                   |
|                                                |              |       |            | 29,800,000                      |                        |                     |                                    |
| Entire Project                                 | 61           | Being |            | 0                               |                        |                     |                                    |
| determined                                     |              |       |            | 29,800,000                      |                        |                     |                                    |
| Estimated Total Appropriation                  |              |       |            |                                 |                        |                     |                                    |
| Requirement                                    |              |       | \$ 0       |                                 |                        |                     |                                    |
| Future Non-Federal Reimbursement               |              |       | 0          |                                 |                        |                     |                                    |
| Estimated Federal Cost (Ultimate)              |              |       | 29,800,000 |                                 |                        |                     |                                    |
| Estimated Non-Federal Cost                     |              |       |            |                                 |                        |                     |                                    |
| Cash Contributions                             |              |       |            | 29,800,000                      |                        |                     |                                    |
| Other Costs                                    |              |       |            |                                 |                        |                     |                                    |
| Reimbursements                                 |              |       |            | 17,466,000                      |                        |                     |                                    |
| Power                                          | \$29,800,000 |       |            | 4,500,000                       |                        |                     |                                    |
| Total Estimated Project Cost                   |              |       |            | 4,771,000                       | 1/                     |                     |                                    |
|                                                |              |       |            | 22,237,000                      | 75                     |                     |                                    |
| Allocations to 30 September 2000               |              |       |            | 4,300,000                       | 89                     |                     |                                    |
| Conference Allowance to FY 2001                |              |       |            | 3,263,000                       | 100                    |                     |                                    |
| Allocation for FY 2001                         |              |       |            | 0                               |                        |                     |                                    |
| Allocation through FY 2001                     |              |       |            |                                 |                        |                     |                                    |
| Allocation Requested for FY 2002               |              |       |            |                                 |                        |                     |                                    |
| Programmed Balance to Complete After FY 2002   |              |       |            |                                 |                        |                     |                                    |
| Unprogrammed Balance to Complete After FY 2002 |              |       |            |                                 |                        |                     |                                    |

1/ Reflects \$720,000 reduction assigned as savings and slippage, \$1,000,000 reprogrammed to the project and \$9,000 rescinded in accordance with the Consolidated Appropriations Act, 2001.

PHYSICAL DATA:

Replace main transformers  
Rewind 3 generators  
Replace 3 turbines including items listed below:  
Runner  
Shaft  
Wicket gate bushings  
Governor  
Piping

JUSTIFICATION: The Jim Woodruff Powerhouse has experienced a decaying reliability level since the early 1970's. Contributing factors in the reliability decline are welded turbine blades, age and tailwater degradation that has increased hydraulic head and decreased submergence on the turbines. Engineering analysis shows that these problems along with increasing generating outages can be expected to continue into the future. The result of these increased outages, as well as the reduced plant efficiencies, will be increased operation and maintenance costs, increased production costs and loss of generating revenues to the treasury. Continued operation of Jim Woodruff powerhouse in its deteriorated state without rehabilitation, has an impact on total power production costs in North Florida amounting to \$3.5 million per year. Average annual benefits for the major rehabilitation project are \$3,541,000.

FISCAL YEAR 2002: The requested amount will be applied as follows:

|                                |                |
|--------------------------------|----------------|
| Continue Construction          | \$3,950,000    |
| Planning, Engineering & Design | 50,000         |
| Construction Management        | <u>300,000</u> |
| TOTAL                          | \$4,300,000    |

NON-FEDERAL COST: The costs allocable to power are reimbursable, and will be reviewed and adjusted based on construction costs when the project becomes operational.

|                                   | Payments<br>During<br>Construction<br>and<br>Reimbursements | Annual,<br>Operation,<br>Maintenance,<br>and<br>Replacement<br>Costs |
|-----------------------------------|-------------------------------------------------------------|----------------------------------------------------------------------|
| Requirements of Local Cooperation |                                                             |                                                                      |
| Capital Cost allocated to power   | \$29,800,000                                                | 0                                                                    |
| Total Non-Federal Costs           | \$29,800,000                                                | 0                                                                    |

STATUS OF LOCAL COOPERATION: Responsibility for repayment of hydropower costs rests with Southeastern Power Administration pursuant to Federal law.

COMPARISON OF FEDERAL COST ESTIMATE: The current Federal (Corps) cost estimate of \$29,800,000 is a decrease of \$800,000 from the latest estimate (\$30,600,000) presented to Congress (FY 2001). This change includes the following items.

| Item                                                                                        | Amount     |
|---------------------------------------------------------------------------------------------|------------|
| Post Contract Award and Other Estimating Adjustments<br>(Including Contingency Adjustments) | -\$800,000 |
| Total                                                                                       | -\$800,000 |

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: A draft Environmental Assessment (EA) was prepared which addressed the expected impacts of the recommended alternative as well as other potential alternatives under consideration. The draft EA contained a biological assessment (BA), as required under the Endangered Species Act of 1973, which concluded with a determination of no adverse effect on the Gulf of Mexico sturgeon, a threatened species which occurs in the tailrace area. The draft EA, containing the BA, concluded with a Finding of No Significant Impact (FONSI). The Draft EA and FONSI were fully coordinated with the public and State and Federal agencies. The U.S. Fish and Wildlife Service (USFWS) concurred with the BA determination of no adverse effect on the sturgeon. The State of Florida determined the project to be consistent with the State Coastal Zone Management Program. The commenting agencies concurred with the FONSI for the recommended alternative discussed in the draft environmental documentation. Agency comments were then incorporated into the final EA and FONSI, which was signed on 1 March 1993.

OTHER INFORMATION: Funds to initiate construction were appropriated in FY 1996.

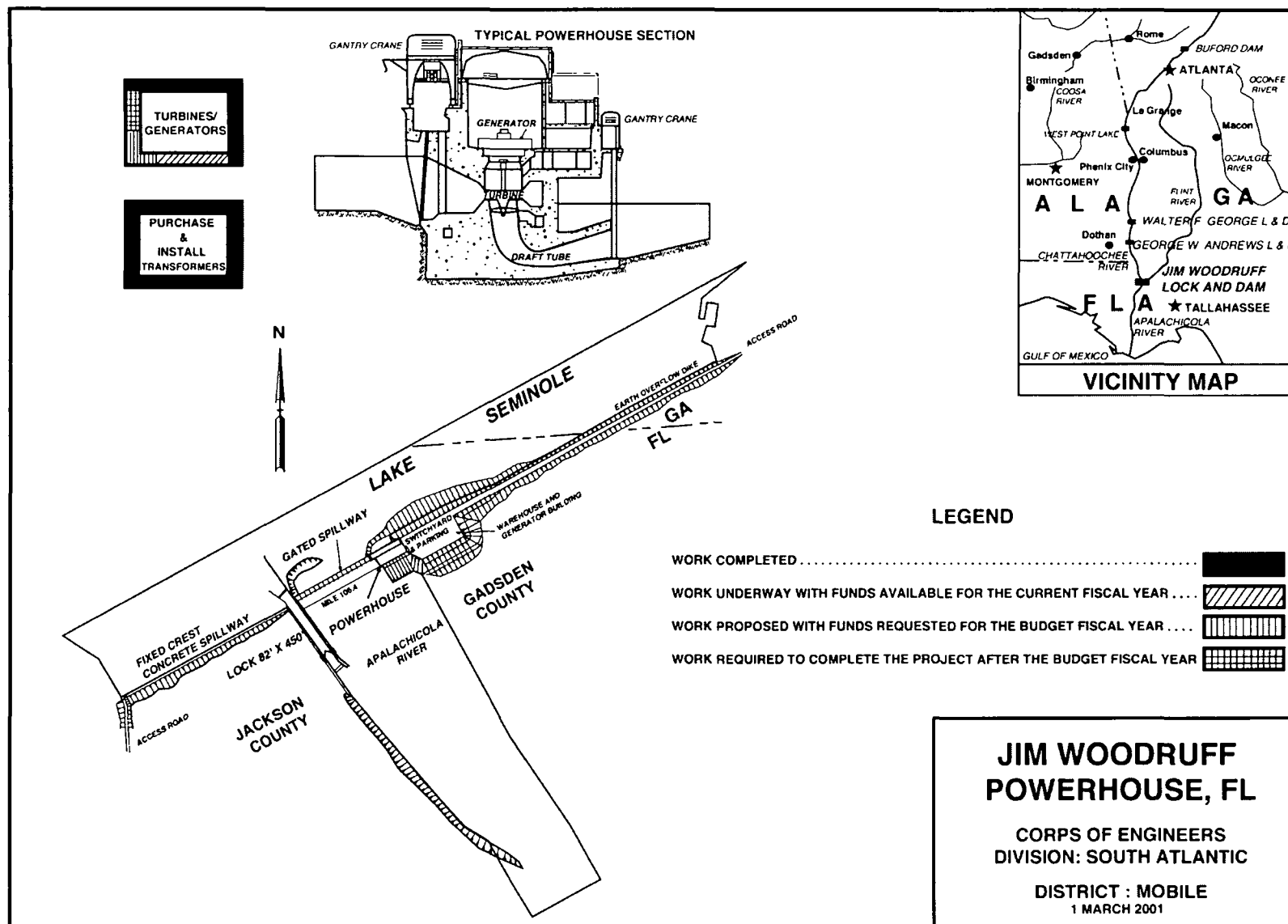
Division: South Atlantic

District: Mobile

Jim Woodruff Powerhouse, FL & GA

3 April 2001

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APPROPRIATION: Construction, General - Hydropower (Major Rehabilitation)

PROJECT: Buford Powerhouse, GA (Major Rehabilitation) (Continuing)

LOCATION: The Buford Dam is located at mile 455 on the Chattahoochee River, 50 miles northeast of Atlanta, Georgia. Buford is a multiple purpose project for flood control, hydropower, recreation, and water supply. Power installation consists of two units of 40,000 kilowatts each and one small unit of 6,000 kilowatts (86,000 kw total)

DESCRIPTION: The plan of improvement is to replace the three turbines and the exciters, and rewind the three generators.

AUTHORIZATION: Section 2 of the River and Harbor Act of 1945, further modified by the River and Harbor Act of 1946.

REMAINING BENEFIT-REMAINING COST RATIO: 2.4 to 1 at 7 5/8 percent.

TOTAL BENEFIT-COST RATIO: 1.8 to 1 at 7 5/8 percent.

INITIAL BENEFIT-COST RATIO: 1.3 to 1 at 7 5/8 percent.

BASIS OF BENEFIT-COST RATIO: Benefits are from the Major Rehabilitation Evaluation Report approved in July 1996 at October 1995 price levels.

| SUMMARIZED FINANCIAL DATA                      |              | ACCUM<br>PCT OF<br>EST<br>FED COST | STATUS<br>(1 Jan 2001) | PERCENT<br>COMPLETE | PHYSICAL<br>COMPLETION<br>SCHEDULE |
|------------------------------------------------|--------------|------------------------------------|------------------------|---------------------|------------------------------------|
|                                                |              |                                    | Entire Project         | 10                  | Being determined                   |
| Estimated Total Appropriation Requirement      |              | \$27,200,000                       |                        |                     |                                    |
| Future Non-Federal Reimbursement               |              | 27,200,000                         |                        |                     |                                    |
| Estimated Federal Cost (Ultimate)              |              | 0                                  |                        |                     |                                    |
| Estimated Non-Federal Cost                     |              | 27,200,000                         |                        |                     |                                    |
| Cash Contributions                             | \$ 0         |                                    |                        |                     |                                    |
| Other Costs                                    | 0            |                                    |                        |                     |                                    |
| Reimbursements                                 | 27,200,000   |                                    |                        |                     |                                    |
| Power                                          | \$27,200,000 |                                    |                        |                     |                                    |
| Total Estimated Project Cost                   |              | 27,200,000                         |                        |                     |                                    |
| Allocations to 30 September 2000               |              | 3,196,000                          |                        |                     |                                    |
| Conference Allowance for FY 2001               |              | 2,455,000                          |                        |                     |                                    |
| Allocation for FY 2001                         |              | 4,123,000                          | 1/                     |                     |                                    |
| Allocation through FY 2001                     |              | 7,319,000                          | 27                     |                     |                                    |
| Allocation Requested for FY 2002               |              | 3,000,000                          | 38                     |                     |                                    |
| Programmed Balance to Complete After FY 2002   |              | 16,881,000                         | 100                    |                     |                                    |
| Unprogrammed Balance to Complete after FY 2002 |              | 0                                  |                        |                     |                                    |

1/ Reflects \$393,000 reduction assigned as savings and slippage, \$2,066,000 reprogrammed to the project and \$5,000 rescinded in accordance with the Consolidated Appropriations Act, 2001.

PHYSICAL DATA:

- Rewind 3 generators
- Replace exciters with static exciters
- Replace 3 turbines with redesigned turbines based on current hydrology

Division: South Atlantic

District: Mobile

Buford Powerhouse, GA

3 April 2001

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JUSTIFICATION: The Buford Powerhouse units are 38 years old and exhibit the deterioration and wear normally expected for units of such age. Contributing factors in the reliability decline in addition to age of the units are that the generator stator coils in the two main units have decayed greatly, and the turbines are experiencing both increased recurring and progressive cavitation problems. These assessments of the Buford units, which have surpassed the mean life expectancy of 35 years, support the concern that the end of their useful life is eminent. Engineering analysis shows that these problems along with increasing generating outages can be expected to continue into the future. The result of these increased outages, as well as the reduced plant efficiencies, will be increased operation and maintenance costs, increased production costs and loss of generating revenues to the treasury. Average annual benefits to the major rehabilitation project are \$2,894,000.

FISCAL YEAR 2002: The requested amount will be applied in FY 2002 as follows.

|                                 |                  |
|---------------------------------|------------------|
| Continue Construction           | \$ 2,560,000     |
| Planning, Engineering, & Design | 200,000          |
| Construction Management         | <u>240,000</u>   |
| <br>TOTAL                       | <br>\$ 3,000,000 |

NON-FEDERAL COST: The costs allocable to power are reimbursable, and will be reviewed and adjusted based on construction costs when the project becomes operational.

|                                   | Payments<br>During<br>Construction<br>and<br>Reimbursements | Annual,<br>Operation,<br>Maintenance,<br>and<br>Replacement<br>Costs |
|-----------------------------------|-------------------------------------------------------------|----------------------------------------------------------------------|
| Requirements of Local Cooperation |                                                             |                                                                      |
| Capital Cost allocated to power   | \$27,200,000                                                | \$ 0                                                                 |
| Total Non-Federal Costs           | \$27,200,000                                                | \$ 0                                                                 |

STATUS OF LOCAL COOPERATION: Responsibility for repayment of hydropower costs rests with the Southeastern Power Administration pursuant to Federal law.

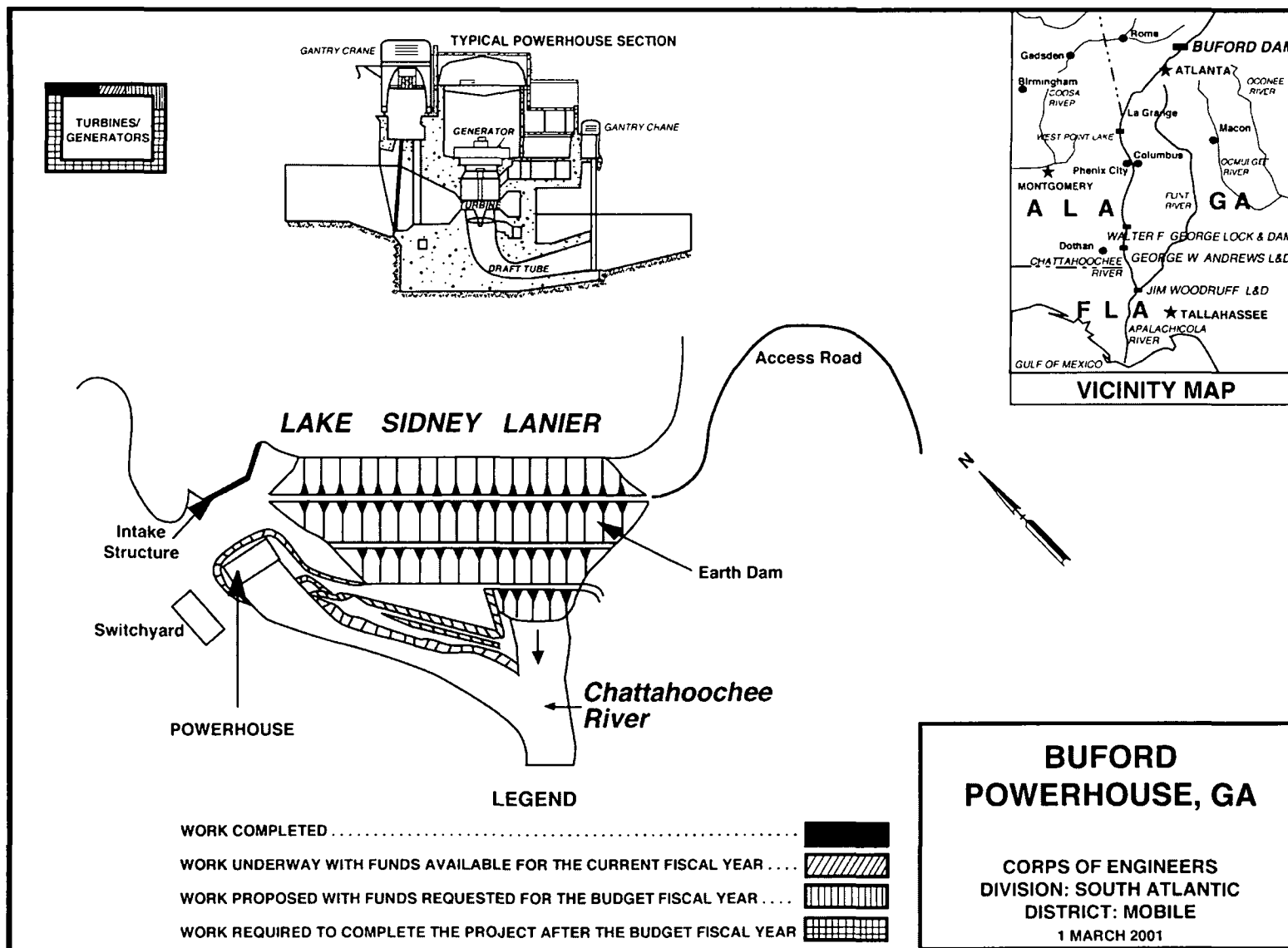


COMPARISON OF FEDERAL COST ESTIMATE: The current Federal (Corps) cost estimate of \$27,200,000 is a decrease of \$6,500,000 from the latest estimate (\$33,700,000) presented to Congress (FY 2001). This change includes the following items:

| Item                                                 | Amount       |
|------------------------------------------------------|--------------|
| Post Contract Award and Other Estimating Adjustments | -\$6,500,000 |
| Total                                                | -\$6,500,000 |

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An Environmental Assessment (EA) was prepared which addressed the expected impacts of the recommended alternative as well as other potential alternatives under consideration. The EA concluded with a Finding of No Significant Impact (FONSI). The EA and FONSI were fully coordinated with the public and State and Federal agencies. The commenting agencies concurred with the FONSI for the recommended alternative discussed in the environmental documentation. Agency comments were then incorporated into the final EA and FONSI, which was signed on 7 March 1996.

OTHER INFORMATION: Funds to initiate construction were appropriated in Fiscal Year 1998.



APPROPRIATION TITLE: Construction, General – Multiple Purpose Power

PROJECT: Hartwell Lake Powerhouse, Georgia and South Carolina (Major Rehabilitation) (Continuing)

LOCATION. The project is located on the Savannah River, 89 miles north of Augusta, Georgia and 305 miles north of the mouth of the river.

DESCRIPTION: The recommended plan involves the rewinding of four generator units, the refurbishment of the turbines, and the replacement of key electrical/mechanical peripheral equipment to improve the overall reliability of the project, to reduce operation and maintenance costs, and to reduce unscheduled repair costs. All work is programmed.

AUTHORIZATION: Flood Control Act approved 17 May 1950 and Flood Control Act approved 3 July 1958.

REMAINING BENEFIT - REMAINING COST RATIO: 19.0 to 1 at 8 percent.

TOTAL BENEFIT - COST RATIO: 1.81 to 1 at 8 percent.

INITIAL BENEFIT - COST RATIO: 3.1 to 1 at 8 percent (FY 1996).

BASIS OF BENEFIT - COST RATIO: Benefits are from the latest available Evaluation Report for New Major Rehabilitation forwarded to HQUSACE in July 1993 at 1993 price levels.

| SUMMARIZED FINANCIAL DATA                      |            | ACCUM<br>PCT OF<br>EST FED<br>COST | STATUS<br>(1 Jan 2001) | PERCENT<br>COMPLETE | PHYSICAL<br>COMPLETION<br>SCHEDULE |
|------------------------------------------------|------------|------------------------------------|------------------------|---------------------|------------------------------------|
| Estimated Total Appropriation Requirement      | 31,000,000 |                                    | Entire Project         | 80                  | Being determined                   |
| Future Non-Federal Reimbursement               | 31,000,000 |                                    |                        |                     |                                    |
| Estimated Federal Cost (Ultimate)              | 0          |                                    |                        |                     |                                    |
| Estimated Non-Federal Cost                     |            |                                    |                        |                     |                                    |
| Cash Contributions                             | 0          |                                    |                        |                     |                                    |
| Reimbursements                                 | 31,000,000 |                                    |                        |                     |                                    |
| Unprogrammed Construction                      |            |                                    |                        |                     |                                    |
| Cash Contributions                             | 0          |                                    |                        |                     |                                    |
| Other Costs                                    | 0          |                                    |                        |                     |                                    |
| Total Estimated Project Cost                   | 31,000,000 |                                    |                        |                     |                                    |
| Allocations to 30 September 2000               | 25,272,000 |                                    |                        |                     |                                    |
| Conference Allowance for FY 2001               | 0          |                                    |                        |                     |                                    |
| Allocation for FY 2001                         | 328,000    | 1/                                 |                        |                     |                                    |
| Allocations through FY 2001                    | 25,600,000 |                                    |                        | 83                  |                                    |
| Allocation Requested for 2002                  | 4,500,000  |                                    |                        | 97                  |                                    |
| Programmed Balance to Complete after FY 2002   | 900,000    |                                    |                        |                     |                                    |
| Unprogrammed Balance to Complete after FY 2002 | 0          |                                    |                        |                     |                                    |

1/ Reflects \$328,000 reprogrammed to the project.

# PHYSICAL DATA

|                     |   |
|---------------------|---|
| Rewind Generators   | 4 |
| Refurbish Turbines  | 4 |
| Replace Peripherals | 4 |

JUSTIFICATION: The Hartwell Powerplant, which was initially placed into operation in 1962, has, over recent years, suffered from frequent unanticipated powerplant shutdowns, an increased level of O&M costs for repair and routine maintenance, and a general decrease in hydropower capacity and power production. These problems have been linked to a once acceptable practice of running the generators for extended periods of time at levels well past their rated capacity which was necessary to provide power needs. The proposed plan of improvement will replace the windings of four generators to state-of-the-art condition and replace key turbine and electrical/mechanical components to allow an increase in hydropower capacity to be made available to the power marketing agencies. The plan of improvement will arrest the further degradation of the hydroelectric units, decrease operation and maintenance costs, improve the powerplant's overall reliability and increase the power generation capability. Average annual benefits for hydroelectric power are \$3,354,600.

FISCAL YEAR 2002: The requested amount of \$4,500,000 will be applied as follows:

|                                       |                    |
|---------------------------------------|--------------------|
| Continue rehabilitation of Powerplant | 3,950,000          |
| Planning, Engineering and Design      | 200,000            |
| Construction Management               | 350,000            |
| <b>Total</b>                          | <b>\$4,500,000</b> |

NON-FEDERAL COST: The costs allocable to power are reimbursable and will be reviewed and adjusted based on construction costs as the project becomes operational. As applicable, the non-Federal sponsor must comply with the requirements listed below:

| Requirements of local Cooperation                                                                                                                    | Payments During Construction and Reimbursements | Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs |
|------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|------------------------------------------------------------------------------|
| Pay all costs allocated to hydropower and bear all costs of operation, maintenance, repair, rehabilitation and replacement of hydropower facilities. | 30,000,000                                      | 120,000                                                                      |
| <b>Total Non-Federal Costs</b>                                                                                                                       | <b>30,000,000</b>                               | <b>120,000</b>                                                               |

Division: South Atlantic

District: Savannah

Hartwell Lake Powerhouse, GA & SC

3 April 2001

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STATUS OF LOCAL COOPERATION: Responsibility for repayment of hydropower cost rests with the Southeastern Power Administration pursuant to Federal laws.

COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps) cost estimate of \$31,000,000 is an increase of \$10,200,000 over the latest estimate (\$20,800,000) submitted to Congress (FY 2001). This change includes the following items:

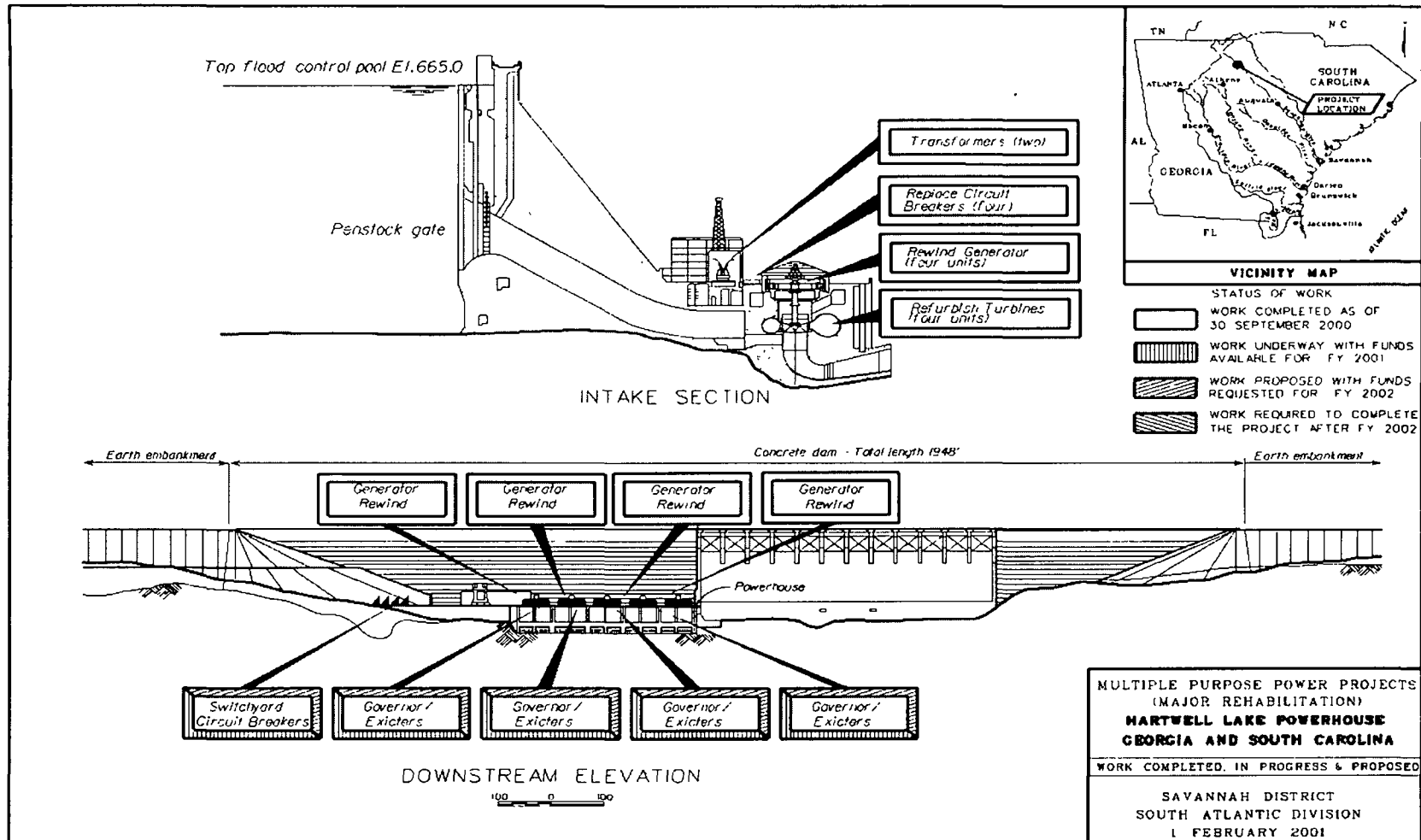
| Item                     | Amount       |
|--------------------------|--------------|
| Authorized Modifications | \$7,600,000  |
| Design Changes           | 2,600,000    |
| Total                    | \$10,200,000 |

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: Based on the environmental analysis contained in the Evaluation Report dated July 1993, an Environmental Assessment with a FONSI has been completed and is contained in the FY 1995 Major Rehabilitation Program, Hartwell Powerplant Evaluation Report.

OTHER INFORMATION: Funds to initiate construction were appropriated in FY 1996.

CORPS OF ENGINEERS

U.S. ARMY



APPROPRIATION TITLE: Construction, General – Multiple Purpose Power

PROJECT: Thurmond Lake Powerhouse, Georgia and South Carolina (Major Rehabilitation) (Continuing)

LOCATION: The project is located on the Savannah River, 22 miles north of Augusta, Georgia and 216 miles north of the mouth of the river.

DESCRIPTION: The recommended plan involves the rewinding of seven generator units, the replacement of the turbine rotating parts, and the refurbishment or replacement of key peripheral equipment in order to improve the overall reliability of the project, to reduce operation and maintenance costs, to reduce unscheduled repair costs, and to provide additional hydropower capacity, power revenues and environmental improvements. All work is programmed.

AUTHORIZATION: Flood Control Act of 1944.

REMAINING BENEFIT - REMAINING COST RATIO: 2.3 to 1 at 8 percent.

TOTAL BENEFIT - COST RATIO: 1.3 to 1 at 8 percent.

INITIAL BENEFIT - COST RATIO: 1.3 to 1 at 8 percent (FY 1996).

BASIS OF BENEFIT - COST RATIO: Benefits are from the latest available Evaluation Report for New Major Rehabilitation Project forwarded to HQUSACE in March 1994 at February 1994 price levels.



| SUMMARIZED FINANCIAL DATA                      | ACCUM<br>PCT OF<br>EST<br>FED COST | STATUS<br>(1 Jan 2001) | PERCENT<br>COMPLETE | PHYSICAL<br>COMPLETION<br>SCHEDULE |
|------------------------------------------------|------------------------------------|------------------------|---------------------|------------------------------------|
| Estimated Total Appropriation Requirement      | 69,700,000                         | Entire Project         | 40                  | Being determined                   |
| Future Non-Federal Reimbursement               | 69,700,000                         |                        |                     |                                    |
| Estimated Federal Cost (Ultimate)              | 0                                  |                        |                     |                                    |
| Estimated Non-Federal Cost                     |                                    |                        |                     |                                    |
| Cash Contributions                             | 0                                  |                        |                     |                                    |
| Reimbursements                                 | 69,700,000                         |                        |                     |                                    |
| Unprogrammed Construction                      |                                    |                        |                     |                                    |
| Cash Contributions                             | 0                                  |                        |                     |                                    |
| Other Costs                                    | 0                                  |                        |                     |                                    |
| Total Estimated Project Cost                   | 69,700,000                         |                        |                     |                                    |
| Allocations to 30 September 2000               | 25,775,000                         |                        |                     |                                    |
| Conference Allowance for FY 2001               | 5,000,000                          |                        |                     |                                    |
| Allocation for FY 2001                         | 3,490,000                          | 1/                     |                     |                                    |
| Allocations through FY 2001                    | 29,265,000                         |                        | 42                  |                                    |
| Allocation Requested for 2002                  | 6,500,000                          |                        | 51                  |                                    |
| Programmed Balance to Complete after FY 2002   | 33,935,000                         |                        |                     |                                    |
| Unprogrammed Balance to Complete after FY 2002 | 0                                  |                        |                     |                                    |

1/ Reflects \$800,000 reduction assigned as savings and slippage, \$700,000 reprogrammed from the project, and \$10,000 rescinded in accordance with the Consolidated Appropriations Act, 2001.

# PHYSICAL DATA

|                     |   |
|---------------------|---|
| Rewind Generators   | 7 |
| Replace Turbines    | 7 |
| Replace Peripherals | 7 |

JUSTIFICATION: The J. Strom Thurmond Powerplant, which was initially placed into operation in 1954, is showing signs of excessive wear of the generators, the peripheral equipment and the turbines. This has resulted in a loss of efficiency, reduced reliability of the units and lost power output for the units. The proposed plan of improvement calls for rewinding the generators to maximum capacity, replacement of the turbine runner, and the replacement or refurbishment of key electrical/mechanical peripheral equipment. The plan of improvement will arrest the further degradation of the hydroelectric units, decrease operation and maintenance costs, improve the powerplant's overall reliability, and increase the power generation capability and partially restore some of the environmental impacts of the dam and powerplant. Average annual benefits for hydroelectric power are \$7,890,000.

FISCAL YEAR 2002: The requested amount of \$6,500,000 will be applied as follows:

|                                       |                    |
|---------------------------------------|--------------------|
| Continue rehabilitation of Powerplant | 5,850,000          |
| Planning, Engineering and Design      | 100,000            |
| Construction Management               | 550,000            |
| <b>Total</b>                          | <b>\$6,500,000</b> |

NON-FEDERAL COST: The costs allocable to power are reimbursable and will be reviewed and adjusted based on construction costs when the project becomes operational. The non-Federal sponsor must comply with the requirements listed below:

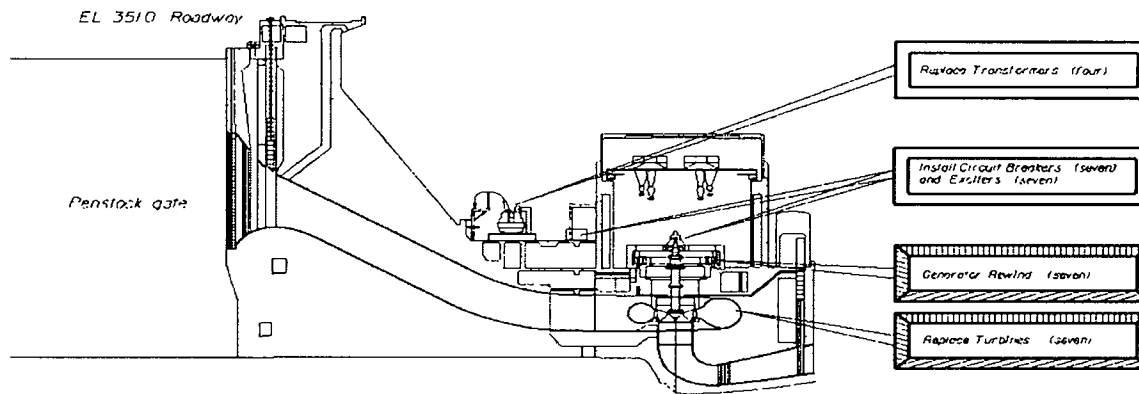
| Requirements of local Cooperation                                                                                                                    | Payments During Construction and Reimbursements | Annual Operation, Maintenance, Repair, Rehabilitation, and Replacement Costs |
|------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|------------------------------------------------------------------------------|
| Pay all costs allocated to hydropower and bear all costs of operation, maintenance, repair, rehabilitation and replacement of hydropower facilities. | 69,700,000                                      | 485,000                                                                      |
| <b>Total Non-Federal Costs</b>                                                                                                                       | <b>69,700,000</b>                               | <b>485,000</b>                                                               |

STATUS OF LOCAL COOPERATION: Responsibility for repayment of hydropower cost rests with the Southeastern Power Administration pursuant to Federal laws.

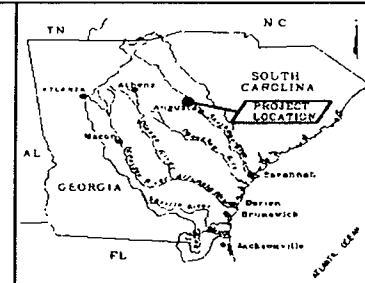
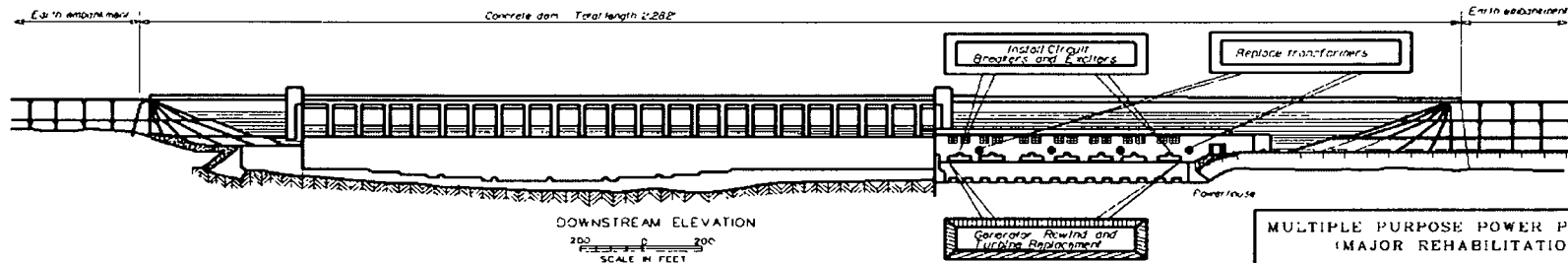
COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps) cost estimate of \$69,700,000 is the same as the latest estimate presented to Congress (FY 2001).

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: Based on the environmental analysis contained in the Evaluation Report dated March 1994, an Environmental Assessment with a FONSI has been completed and is contained in the FY 1996 Major Rehabilitation Program, J. Strom Thurmond Powerplant Evaluation Report.

OTHER INFORMATION: Funds to initiate construction were appropriated in FY 1996.



INTAKE SECTION



VICINITY MAP

## STATUS OF WORK

- WORK COMPLETED AS OF 30 SEPTEMBER 2000
- WORK UNDERWAY WITH FUNDS AVAILABLE FOR FY 2001
- WORK PROPOSED WITH FUNDS REQUESTED FOR FY 2002
- WORK REQUIRED TO COMPLETE THE PROJECT AFTER FY 2002

**MULTIPLE PURPOSE POWER PROJECTS  
(MAJOR REHABILITATION)  
THURMOND LAKE POWERHOUSE  
GEORGIA AND SOUTH CAROLINA**

WORK COMPLETED IN PROGRESS & PROPOSED

SAVANNAH DISTRICT  
SOUTH ATLANTIC DIVISION  
1 FEBRUARY 2001

APPROPRIATION TITLE: Construction, General - Multiple Purpose Power

PROJECT: John H. Kerr Dam and Reservoir, VA & NC (Major Rehab)

LOCATION: The Kerr Powerhouse is located on the Roanoke River in Mecklenburg County, Virginia, 7 miles east of Boydton, Virginia, 80 air miles southwest of Richmond, Virginia, and 60 air miles north of Raleigh, North Carolina.

DESCRIPTION: The recommended plan involves the rewinding of seven generator units to maximum capacity, refurbishment of the turbines, replacement of the main power transformers, and the replacement or refurbishment of key electrical and mechanical peripheral equipment in order to improve the overall reliability of the project, reduce operation and maintenance costs, reduce unscheduled repair costs, and provide additional hydropower capacity and power revenues.

AUTHORIZATION: Flood Control Act of 1944.

REMAINING BENEFIT-REMAINING COST RATIO. 1.5 to 1 at 7-1/8 percent.

TOTAL BENEFIT-COST RATIO: 1.4 to 1 at 7-1/8 percent.

INITIAL BENEFIT - COST RATIO: 1.4 to 1 at 7-1/8 percent (FY 2000).

BASIS OF BENEFIT-COST RATIO: Benefits are from the latest available evaluations contained in the Major Rehabilitation Evaluation Report addendum and transmittal memorandum dated June 1997, at October 1996 price levels.

| SUMMARIZED FINANCIAL DATA                      |              | ACCUM<br>PCT OF<br>EST<br>FED COST | STATUS<br>(1 Jan 2001) | PERCENT<br>COMPLETE | PHYSICAL<br>COMPLETION<br>SCHEDULE |
|------------------------------------------------|--------------|------------------------------------|------------------------|---------------------|------------------------------------|
| Estimated Total Appropriation Requirement      | \$61,800,000 |                                    | Entire Project         | 2                   | Being Determined                   |
| Future Non-Federal Reimbursement               | \$61,800,000 |                                    |                        |                     |                                    |
| Estimated Non-Federal Cost (Ultimate)          | \$ 0         |                                    |                        |                     |                                    |
| Cash Contributions                             | \$ 0         |                                    |                        |                     |                                    |
| Other Costs                                    | \$ 0         |                                    |                        |                     |                                    |
| Reimbursements                                 | \$61,800,000 |                                    |                        |                     |                                    |
| Power                                          | \$61,800,000 |                                    |                        |                     |                                    |
| Total Estimated Project Cost                   | \$61,800,000 |                                    |                        |                     |                                    |
| Allocations to 30 September 2000               | \$ 1,201,000 |                                    |                        |                     |                                    |
| Conference Allowance for FY 2001               | 4,000,000    |                                    |                        |                     |                                    |
| Allocation for FY 2001                         | 3,352,000    | 1/                                 |                        |                     |                                    |
| Allocations through FY 2001                    | 4,801,000    | 7                                  |                        |                     |                                    |
| Allocation Requested for 2002                  | \$4,800,000  | 15                                 |                        |                     |                                    |
| Programmed Balance to Complete after FY 2002   | 52,447,000   |                                    |                        |                     |                                    |
| Unprogrammed Balance to Complete after FY 2002 | 0            |                                    |                        |                     |                                    |

1/Reflects \$640,000 reduction assigned as savings and slippage and \$8,000 reduction for FY 2001 Omnibus Appropriations Act.

#### PHYSICAL DATA

Rewind Generator 7

JUSTIFICATION: The John H. Kerr Powerplant, which was initially placed into operation in 1953, is showing signs of excessive wear of the generators, the peripheral equipment and the turbines. This has resulted in a loss of efficiency, reduced reliability of the units and lost power output for the units. The recommended plan of improvement calls for rewinding the generators to maximum capacity, refurbishment of the turbines, replacement of the main power transformers, and replacement or refurbishment of key electrical/mechanical peripheral equipment. The recommended plan will improve the powerplant's overall reliability, reduce further degradation of the hydroelectric units, decrease operation and maintenance costs, and increase the power generation capability. There is growing concern with project reliability due to recent malfunctions of oil circuit breakers in the switchyard, for which repair parts are no longer available and must be custom fabricated; frequent leaks in the raw water piping system, which is in extremely poor condition throughout; and the extremely heavy cavitation observed in the runner, stay ring and discharge ring of unit #5. Average annual benefits for hydroelectric power are \$6,633,700.

FISCAL YEAR 2002: The requested amount of \$4,800,000 will be applied as follows:

|                                  |             |
|----------------------------------|-------------|
| Rehabilitation of power plant    | \$3,415,000 |
| Planning, Engineering and Design | 520,000     |
| Construction Management          | 865,000     |
| Total                            | \$4,800,000 |

NON-FEDERAL COST: The costs allocable to power are reimbursable, and will be reviewed and adjusted based on construction costs when the project becomes operational.

|                                                                                                                                                     | Payments During<br>Construction and<br>Reimbursements | Annual Operation,<br>Maintenance, Repair,<br>Rehabilitation, and<br>Replacement Costs |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|---------------------------------------------------------------------------------------|
| Requirements of local Cooperation                                                                                                                   |                                                       |                                                                                       |
| Pay all costs allocated to hydropower and bear all costs of operation, maintenance, repair, rehabilitation and replacement of hydropower facilities | \$61,800,000                                          | \$4,143,000                                                                           |

STATUS OF LOCAL COOPERATION: Pursuant to Federal Laws responsibility for repayment of hydropower costs rests with the power marketing agency, the Southeast Power Administration.

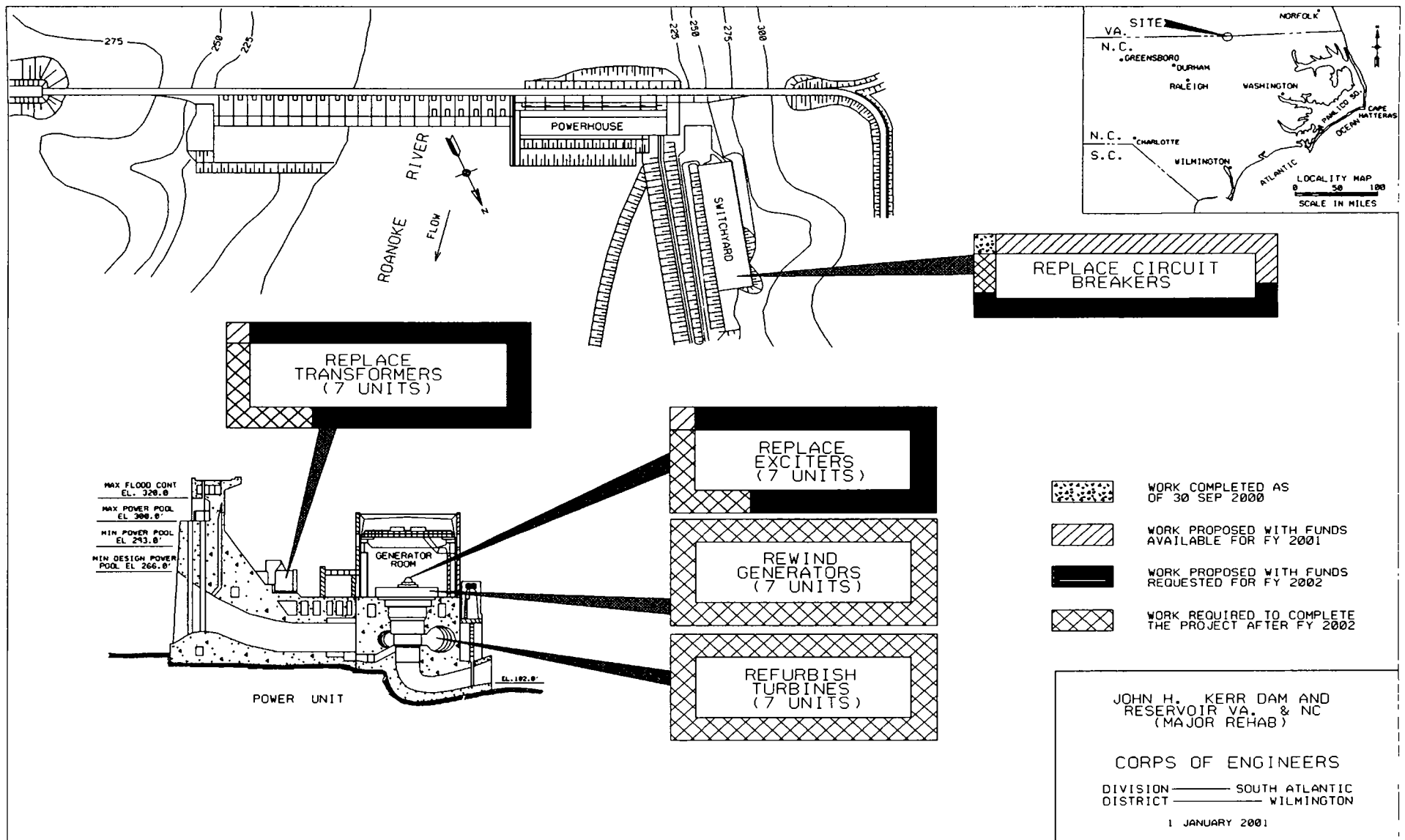
COMPARISON OF FEDERAL COST ESTIMATES: The current Federal (Corps) cost estimate of \$61,800,000 is a decrease of \$500,000 from the latest estimate (\$62,300,000) presented to Congress (FY 2001). This change includes the following items.

| Item                                                 | Amount      |
|------------------------------------------------------|-------------|
| Price Escalation on Construction Features            | -\$ 500,000 |
| Design Changes                                       | 1,184,000   |
| Post Contract Award and Other Estimating Adjustments | -1,184,000  |
| Total                                                | -\$ 500,000 |

STATUS OF ENVIRONMENTAL IMPACT STATEMENT: An Environmental Assessment and Finding of No Significant Impact was prepared and distributed in December 1996 for public comment. The Finding of No Significant Impact was signed by the District Engineer on 7 February 1997.

OTHER INFORMATION: None.





Division: South Atlantic

District: Wilmington

John H. Kerr Dam and Reservoir, VA & NC

3 April 2001

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SOUTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

1. Navigation

a. Channels and Harbors

The program request of \$123,505,000 provides for essential work on 52 harbor and channel projects named in the list which follows. The work to be accomplished under this activity consists of maintaining the navigation channels and harbors and anchorages of coastal harbors and waterways by means of dredging, snagging, bank revetment, and operation and repair of navigation structures, all as authorized in the laws adopting river and harbor projects.

| STATE               | ESTIMATED     | OBLIGATIONS   |                                                                     |
|---------------------|---------------|---------------|---------------------------------------------------------------------|
|                     | FY 2001 (\$)  | FY 2002 (\$)  | Reason for Change and Major Maintenance Items                       |
| Project Name        | Total         | Total         |                                                                     |
|                     | (Operations)  | (Operations)  | 1. Reason for Change in Operations from FY 01 to FY 02 (10%+/-).    |
|                     | (Maintenance) | (Maintenance) | 2. Major Maintenance Items Budgeted in FY 02 (Threshold \$500,000). |
| <hr/> ALABAMA       |               |               |                                                                     |
| Bayou La Batre      | 1,999,000     | 50,000        |                                                                     |
|                     | (105,000)     | (50,000)      | 1. Decrease in environmental studies.                               |
|                     | (1,894,000)   | (0)           | 2. None.                                                            |
| Bon Secour River    | 0             | 20,000        |                                                                     |
|                     | (0)           | (20,000)      | 1. Increase in environmental studies.                               |
|                     | (0)           | (0)           | 2. None.                                                            |
| Dauphin Island Bay  | 60,000        | 250,000       |                                                                     |
|                     | (60,000)      | (50,000)      | 1. Decrease in environmental studies and monitoring.                |
|                     | (0)           | (200,000)     | 2. None.                                                            |
| Dog and Fowl Rivers | 66,000        | 450,000       |                                                                     |
|                     | (66,000)      | (66,000)      | 1. None.                                                            |
|                     | (0)           | (384,000)     | 2. None.                                                            |

SOUTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

1. Navigation (Cont.)

a. Channels and Harbors (Cont.)

| STATE             | ESTIMATED     | OBLIGATIONS   |                                                                     |
|-------------------|---------------|---------------|---------------------------------------------------------------------|
|                   | FY 2001 (\$)  | FY 2002 (\$)  | Reason for Change and Major Maintenance Items                       |
| Project Name      | Total         | Total         |                                                                     |
|                   | (Operations)  | (Operations)  | 1. Reason for Change in Operations from FY 01 to FY 02 (10%+/-).    |
|                   | (Maintenance) | (Maintenance) | 2. Major Maintenance Items Budgeted in FY 02 (Threshold \$500,000). |
| Fly Creek         | 0             | 200,000       |                                                                     |
|                   | (0)           | (0)           | 1. None.                                                            |
|                   | (0)           | (200,000)     | 2. None.                                                            |
| Gulf Intracoastal | 4,734,000     | 5,000,000     |                                                                     |
| Waterway (Mobile) | (322,000)     | (333,000)     | 1. None.                                                            |
|                   | (4,412,000)   | (4,667,000)   | 2. Dredging.                                                        |
| Mobile Harbor     | 18,665,000    | 18,900,000    |                                                                     |
|                   | (243,000)     | (492,000)     | 1. Increase in environmental studies.                               |
|                   | (18,422,000)  | (18,408,000)  | 2. Dredging.                                                        |
| FLORIDA           |               |               |                                                                     |
| Apalachicola Bay  | 0             | 300,000       |                                                                     |
|                   | (0)           | (0)           | 1. None.                                                            |
|                   | (0)           | (300,000)     | 2. None.                                                            |
| Canaveral Harbor  | 7,625,000     | 3,966,000     |                                                                     |
|                   | (643,000)     | (718,000)     | 1. Increase in environmental studies.                               |
|                   | (6,982,000)   | (3,248,000)   | 2. Dredging.                                                        |

3 April 2001

SOUTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

1. Navigation (Cont.)

a. Channels and Harbors (Cont.)

| STATE                      | ESTIMATED     | OBLIGATIONS   |                                                                     |
|----------------------------|---------------|---------------|---------------------------------------------------------------------|
|                            | FY 2001 (\$)  | FY 2002 (\$)  | Reason for Change and Major Maintenance Items                       |
| Project Name               | Total         | Total         |                                                                     |
|                            | (Operations)  | (Operations)  | 1. Reason for Change in Operations from FY 01 to FY 02 (10%+/-).    |
|                            | (Maintenance) | (Maintenance) | 2. Major Maintenance Items Budgeted in FY 02 (Threshold \$500,000). |
| East Pass                  | 0             | 700,000       |                                                                     |
|                            | (0)           | (66,000)      | 1. Increase in environmental studies and monitoring.                |
|                            | (0)           | (634,000)     | 2. Dredging.                                                        |
| Fernandina Harbor          | 2,705,000     | 3,037,000     |                                                                     |
|                            | (108,000)     | (50,000)      | 1. Decrease in studies and surveys.                                 |
|                            | (2,597,000)   | (2,987,000)   | 2. Dredging.                                                        |
| Fort Pierce Harbor         | 1,051,000     | 49,000        |                                                                     |
|                            | (22,000)      | (35,000)      | 1. Increase in real estate management.                              |
|                            | (1,029,000)   | (14,000)      | 2. None.                                                            |
| Horseshoe Cove             | 0             | 520,000       |                                                                     |
|                            | (0)           | (0)           | 1. None.                                                            |
|                            | (0)           | (520,000)     | 2. Dredging.                                                        |
| IWW, Jacksonville to Miami | 4,035,000     | 2,173,000     |                                                                     |
|                            | (563,000)     | (513,000)     | 1. Decrease in studies and surveys.                                 |
|                            | (3,472,000)   | (1,660,000)   | 2. Dredging.                                                        |

SOUTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

1. Navigation (Cont.)

a. Channels and Harbors (Cont.)

| STATE               | ESTIMATED     | OBLIGATIONS   |                                                                     |
|---------------------|---------------|---------------|---------------------------------------------------------------------|
|                     | FY 2001 (\$)  | FY 2002 (\$)  | Reason for Change and Major Maintenance Items                       |
| Project Name        | Total         | Total         |                                                                     |
|                     | (Operations)  | (Operations)  | 1. Reason for Change in Operations from FY 01 to FY 02 (10%+/-).    |
|                     | (Maintenance) | (Maintenance) | 2. Major Maintenance Items Budgeted in FY 02 (Threshold \$500,000). |
| Jacksonville Harbor | 7,755,000     | 4,040,000     |                                                                     |
|                     | (120,000)     | (320,000)     | 1. Increase in studies and surveys.                                 |
|                     | (7,635,000)   | (3,720,000)   | 2. Dredging.                                                        |
| Manatee Harbor      | 3,080,000     | 20,000        |                                                                     |
|                     | (120,000)     | (20,000)      | 1. Decrease in environmental studies and monitoring.                |
|                     | (2,960,000)   | (0)           | 2. None.                                                            |
| Miami Harbor        | 1,323,000     | 3,700,000     |                                                                     |
|                     | (118,000)     | (0)           | 1. Decrease in studies and surveys.                                 |
|                     | (1,205,000)   | (3,700,000)   | 2. Dredging.                                                        |
| Palm Beach Harbor   | 4,577,000     | 3,253,000     |                                                                     |
|                     | (10,000)      | (10,000)      | 1. None.                                                            |
|                     | (4,567,000)   | (3,243,000)   | 2. Dredging.                                                        |
| Panama City Harbor  | 50,000        | 1,000,000     |                                                                     |
|                     | (50,000)      | (30,000)      | 1. Decrease in studies and surveys.                                 |
|                     | (0)           | (970,000)     | 2. Dredging.                                                        |

SOUTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

1. Navigation (Cont.)

a. Channels and Harbors (Cont.)

| STATE               | ESTIMATED     | OBLIGATIONS   |                                                                     |
|---------------------|---------------|---------------|---------------------------------------------------------------------|
|                     | FY 2001 (\$)  | FY 2002 (\$)  | Reason for Change and Major Maintenance Items                       |
| Project Name        | Total         | Total         |                                                                     |
|                     | (Operations)  | (Operations)  | 1. Reason for Change in Operations from FY 01 to FY 02 (10%+/-).    |
|                     | (Maintenance) | (Maintenance) | 2. Major Maintenance Items Budgeted in FY 02 (Threshold \$500,000). |
| Pensacola Harbor    | 0             | 500,000       |                                                                     |
|                     | (0)           | (500,000)     | 1. Increase in environmental studies and monitoring.                |
|                     | (0)           | (0)           | 2. None.                                                            |
| Ponce De Leon Inlet | 46,000        | 2,032,000     |                                                                     |
|                     | (39,000)      | (32,000)      | 1. Decrease in real estate management.                              |
|                     | (7,000)       | (2,000,000)   | 2. Jetty Repair.                                                    |
| Port St Joe Harbor  | 0             | 500,000       |                                                                     |
|                     | (0)           | (500,000)     | 1. Increase in environmental studies and monitoring.                |
|                     | (0)           | (0)           | 2. None.                                                            |
| Tampa Harbor        | 6,308,000     | 4,163,000     |                                                                     |
|                     | (147,000)     | (300,000)     | 1. Increase in studies and surveys.                                 |
|                     | (6,161,000)   | (3,863,000)   | 2. Dredging.                                                        |
| Withlacoochee River | 35,000        | 34,000        |                                                                     |
|                     | (1,000)       | (0)           | 1. Decrease in real estate management.                              |
|                     | (34,000)      | (34,000)      | 2. None.                                                            |

3 April 2001

SOUTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

1. Navigation (Cont.)

a. Channels and Harbors (Cont.)

| STATE            | ESTIMATED     | OBLIGATIONS   |                                                                     |
|------------------|---------------|---------------|---------------------------------------------------------------------|
|                  | FY 2001 (\$)  | FY 2002 (\$)  | Reason for Change and Major Maintenance Items                       |
| Project Name     | Total         | Total         |                                                                     |
|                  | (Operations)  | (Operations)  | 1. Reason for Change in Operations from FY 01 to FY 02 (10%+/-).    |
|                  | (Maintenance) | (Maintenance) | 2. Major Maintenance Items Budgeted in FY 02 (Threshold \$500,000). |
| GEORGIA          |               |               |                                                                     |
| AIWW (Savannah)  | 2,460,000     | 2,172,000     |                                                                     |
|                  | (252,000)     | (262,000)     | 1. None.                                                            |
|                  | (2,208,000)   | (1,910,000)   | 2. Dredging.                                                        |
| Brunswick Harbor | 5,271,000     | 3,902,000     |                                                                     |
|                  | (420,000)     | (350,000)     | 1. Decrease in studies and surveys.                                 |
|                  | (4,851,000)   | (3,552,000)   | 2. Dredging.                                                        |
| Savannah Harbor  | 13,869,000    | 12,911,000    |                                                                     |
|                  | (1,049,000)   | (1,168,000)   | 1. Increase in environmental studies and monitoring.                |
|                  | (12,820,000)  | (11,743,000)  | 2. Dredging.                                                        |
| Savannah River   | 650,000       | 215,000       |                                                                     |
| Below Augusta    | (119,000)     | (131,000)     | 1. Increase in water management.                                    |
|                  | (531,000)     | (84,000)      | 2. None.                                                            |

SOUTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

1. Navigation (Cont.)

a. Channels and Harbors (Cont.)

| STATE                 | ESTIMATED     | OBLIGATIONS   |                                                                     |
|-----------------------|---------------|---------------|---------------------------------------------------------------------|
|                       | FY 2001 (\$)  | FY 2002 (\$)  | Reason for Change and Major Maintenance Items                       |
| Project Name          | Total         | Total         |                                                                     |
|                       | (Operations)  | (Operations)  | 1. Reason for Change in Operations from FY 01 to FY 02 (10%+/-).    |
|                       | (Maintenance) | (Maintenance) | 2. Major Maintenance Items Budgeted in FY 02 (Threshold \$500,000). |
| <b>MISSISSIPPI</b>    |               |               |                                                                     |
| Biloxi Harbor         | 801,000       | 30,000        |                                                                     |
|                       | (101,000)     | (30,000)      | 1. Decrease environmental studies.                                  |
|                       | (700,000)     | (0)           | 2. None.                                                            |
| Gulfport Harbor       | 2,500,000     | 2,100,000     |                                                                     |
|                       | (323,000)     | (335,000)     | 1. None.                                                            |
|                       | (2,177,000)   | (1,765,000)   | 2. Dredging.                                                        |
| Pascagoula Harbor     | 3,406,000     | 4,200,000     |                                                                     |
|                       | (261,000)     | (376,000)     | 1. Increase in environmental studies.                               |
|                       | (3,145,000)   | (3,824,000)   | 2. Dredging.                                                        |
| <b>NORTH CAROLINA</b> |               |               |                                                                     |
| AIWW (Wilmington)     | 5,831,000     | 2,391,000     |                                                                     |
|                       | (999,000)     | (831,000)     | 1. Decrease in studies and surveys.                                 |
|                       | (4,832,000)   | (1,560,000)   | 2. Dredging.                                                        |



SOUTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

1. Navigation (Cont.)

a. Channels and Harbors (Cont.)

| STATE                    | ESTIMATED     | OBLIGATIONS   |                                                                     |
|--------------------------|---------------|---------------|---------------------------------------------------------------------|
|                          | FY 2001 (\$)  | FY 2002 (\$)  | Reason for Change and Major Maintenance Items                       |
| Project Name             | Total         | Total         |                                                                     |
|                          | (Operations)  | (Operations)  | 1. Reason for Change in Operations from FY 01 to FY 02 (10%+/-).    |
|                          | (Maintenance) | (Maintenance) | 2. Major Maintenance Items Budgeted in FY 02 (Threshold \$500,000). |
| Beaufort Harbor          | 350,000       | 35,000        |                                                                     |
|                          | (0)           | (0)           | 1. None.                                                            |
|                          | (350,000)     | (35,000)      | 2. None.                                                            |
| Bogue Inlet and Channels | 627,000       | 1,267,000     |                                                                     |
|                          | (27,000)      | (27,000)      | 1. None.                                                            |
|                          | (600,000)     | (1,240,000)   | 2. Dredging.                                                        |
| Carolina Beach Inlet     | 1,430,000     | 1,060,000     |                                                                     |
|                          | (0)           | (0)           | 1. None.                                                            |
|                          | (1,430,000)   | (1,060,000)   | 2. Dredging.                                                        |
| Lockwoods Folly River    | 455,000       | 895,000       |                                                                     |
|                          | (0)           | (0)           | 1. None.                                                            |
|                          | (455,000)     | (895,000)     | 2. Dredging.                                                        |
| Manteo (Shallowbag) Bay  | 4,995,000     | 4,863,000     |                                                                     |
|                          | (183,000)     | (288,000)     | 1. Increase in studies and surveys.                                 |
|                          | (4,812,000)   | (4,575,000)   | 2. Dredging.                                                        |

SOUTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

1. Navigation (Cont.)

a. Channels and Harbors (Cont.)

| STATE                                        | ESTIMATED                             | OBLIGATIONS                           |                                                                     |
|----------------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------------------------------------|
|                                              | FY 2001 (\$)                          | FY 2002 (\$)                          | Reason for Change and Major Maintenance Items                       |
| Project Name                                 | Total                                 | Total                                 |                                                                     |
|                                              | (Operations)                          | (Operations)                          | 1. Reason for Change in Operations from FY 01 to FY 02 (10%+/-).    |
|                                              | (Maintenance)                         | (Maintenance)                         | 2. Major Maintenance Items Budgeted in FY 02 (Threshold \$500,000). |
| Masonboro Inlet and<br>Connecting Channel    | 45,000<br>(45,000)<br>(0)             | 2,245,000<br>(45,000)<br>(2,200,000)  | 1. None.<br>2. Dredging.                                            |
| Morehead City Harbor                         | 4,737,000<br>(200,000)<br>(4,537,000) | 4,450,000<br>(200,000)<br>(4,250,000) | 1. None.<br>2. Dredging.                                            |
| New River Inlet                              | 825,000<br>(0)<br>(825,000)           | 1,235,000<br>(0)<br>(1,235,000)       | 1. None.<br>2. Dredging.                                            |
| New Topsail Inlet and<br>Connecting Channels | 610,000<br>(0)<br>(610,000)           | 940,000<br>(0)<br>(940,000)           | 1. None.<br>2. Dredging.                                            |
| Pamlico and Tar Rivers                       | 139,000<br>(0)<br>(139,000)           | 139,000<br>(0)<br>(139,000)           | 1. None.<br>2. None.                                                |

SOUTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

1. Navigation (Cont.)

a. Channels and Harbors (Cont.)

| STATE             | ESTIMATED     | OBLIGATIONS   |                                                                     |
|-------------------|---------------|---------------|---------------------------------------------------------------------|
|                   | FY 2001 (\$)  | FY 2002 (\$)  | Reason for Change and Major Maintenance Items                       |
| Project Name      | Total         | Total         |                                                                     |
|                   | (Operations)  | (Operations)  | 1. Reason for Change in Operations from FY 01 to FY 02 (10%+/-).    |
|                   | (Maintenance) | (Maintenance) | 2. Major Maintenance Items Budgeted in FY 02 (Threshold \$500,000). |
| Roanoke River     | 100,000       | 100,000       |                                                                     |
|                   | (0)           | (0)           | 1. None.                                                            |
|                   | (100,000)     | (100,000)     | 2. None.                                                            |
| Wilmington Harbor | 8,405,000     | 5,105,000     |                                                                     |
|                   | (1,125,000)   | (559,000)     | 1. Decrease in environmental studies and surveys.                   |
|                   | (7,280,000)   | (4,546,000)   | 2. Dredging.                                                        |
| SOUTH CAROLINA    |               |               |                                                                     |
| AIWW (Charleston) | 3,629,000     | 1,575,000     |                                                                     |
|                   | (142,000)     | (105,000)     | 1. Decrease in environmental studies.                               |
|                   | (3,487,000)   | (1,470,000)   | 2. Dredging.                                                        |
| Charleston Harbor | 7,145,000     | 5,171,000     |                                                                     |
|                   | (235,000)     | (318,000)     | 1. Increase in environmental studies.                               |
|                   | (6,910,000)   | (4,853,000)   | 2. Dredging.                                                        |

SOUTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

1. Navigation (Cont.)

a. Channels and Harbors (Cont.)

| STATE                              | ESTIMATED                             | OBLIGATIONS                           |                                                                     |
|------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------------------------------------|
|                                    | FY 2001 (\$)                          | FY 2002 (\$)                          | Reason for Change and Major Maintenance Items                       |
| Project Name                       | Total                                 | Total                                 |                                                                     |
|                                    | (Operations)                          | (Operations)                          | 1. Reason for Change in Operations from FY 01 to FY 02 (10%+/-).    |
|                                    | (Maintenance)                         | (Maintenance)                         | 2. Major Maintenance Items Budgeted in FY 02 (Threshold \$500,000). |
| Cooper River,<br>Charleston Harbor | 3,235,000<br>(2,750,000)<br>(485,000) | 3,201,000<br>(2,366,000)<br>(835,000) | 1. Decrease in studies and surveys.<br>2. None.                     |
| Folly River                        | 266,000<br>(9,000)<br>(257,000)       | 748,000<br>(18,000)<br>(730,000)      | 1. Increase in studies and surveys.<br>2. None.                     |
| Georgetown Harbor                  | 5,234,000<br>(318,000)<br>(4,916,000) | 5,738,000<br>(345,000)<br>(5,393,000) | 1. Increase in studies and surveys.<br>2. Dredging.                 |
| Port Royal Harbor                  | 21,000<br>(21,000)<br>(0)             | 169,000<br>(169,000)<br>(0)           | 1. Increase in environmental studies and surveys.<br>2. None.       |
| Shipyard River                     | 477,000<br>(15,000)<br>(462,000)      | 486,000<br>(16,000)<br>(470,000)      | 1. None.<br>2. None.                                                |

3 April 2001

SOUTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

1. Navigation (Cont.)

a. Channels and Harbors (Cont.)

| STATE               | ESTIMATED     | OBLIGATIONS   |                                                                     |
|---------------------|---------------|---------------|---------------------------------------------------------------------|
|                     | FY 2001 (\$)  | FY 2002 (\$)  | Reason for Change and Major Maintenance Items                       |
| <u>Project Name</u> | Total         | Total         |                                                                     |
|                     | (Operations)  | (Operations)  | 1. Reason for Change in Operations from FY 01 to FY 02 (10%+/-).    |
|                     | (Maintenance) | (Maintenance) | 2. Major Maintenance Items Budgeted in FY 02 (Threshold \$500,000). |
| Town Creek          | 398,000       | 305,000       |                                                                     |
|                     | (12,000)      | (0)           | 1. Decrease in studies and surveys.                                 |
|                     | (386,000)     | (305,000)     | 2. None.                                                            |
| Projects Maintained | 6,087,000     | 0             |                                                                     |
| Periodically        | (127,000)     | (0)           |                                                                     |
|                     | (5,960,000)   | (0)           |                                                                     |
| TOTAL - Channels    | 148,112,000   | 123,505,000   |                                                                     |
| and Harbors         | (11,470,000)  | (12,044,000)  |                                                                     |
|                     | (136,642,000) | (111,461,000) |                                                                     |

SOUTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

1. Navigation (Cont.)

b. Locks, Dams, and Canals

The program request of \$50,698,000 provides for the operational requirements of six canalized waterways. Requirements include: operation and ordinary maintenance of project facilities; labor, supplies, materials, and parts for day-to-day functioning; and periodic maintenance, repairs, and replacements.

| STATE                                        | ESTIMATED     | OBLIGATIONS   |                                                                     |
|----------------------------------------------|---------------|---------------|---------------------------------------------------------------------|
|                                              | FY 2001 (\$)  | FY 2002 (\$)  | Reason for Change and Major Maintenance Items                       |
| Project Name                                 | Total         | Total         |                                                                     |
|                                              | (Operations)  | (Operations)  | 1. Reason for Change in Operations from FY 01 to FY 02 (10%+/-).    |
|                                              | (Maintenance) | (Maintenance) | 2. Major Maintenance Items Budgeted in FY 02 (Threshold \$500,000). |
| <hr/>                                        |               |               |                                                                     |
| ALABAMA                                      |               |               |                                                                     |
| Alabama-Coosa Rivers                         | 5,355,000     | 1,555,000     |                                                                     |
|                                              | (1,381,000)   | (1,355,000)   | 1. None.                                                            |
|                                              | (3,974,000)   | (200,000)     | 2. None.                                                            |
| Black Warrior and Tombigbee Rivers           | 19,204,000    | 21,100,000    |                                                                     |
|                                              | (5,836,000)   | (6,124,000)   | 1. Increase in studies and surveys.                                 |
|                                              | (13,368,000)  | (14,976,000)  | 2. Dredging.                                                        |
| <hr/>                                        |               |               |                                                                     |
| ALABAMA AND GEORGIA                          |               |               |                                                                     |
| Apalachicola, Chattahoochee and Flint Rivers | 5,055,000     | 1,237,000     |                                                                     |
|                                              | (1,039,000)   | (1,037,000)   | 1. None.                                                            |
|                                              | (4,016,000)   | (200,000)     | 2. None.                                                            |

SOUTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

1. Navigation (Cont.)

b. Locks, Dams, and Canals (Cont.)

| STATE                                                                  | ESTIMATED     | OBLIGATIONS   |                                                                     |
|------------------------------------------------------------------------|---------------|---------------|---------------------------------------------------------------------|
|                                                                        | FY 2001 (\$)  | FY 2002 (\$)  | Reason for Change and Major Maintenance Items                       |
| Project Name                                                           | Total         | Total         |                                                                     |
|                                                                        | (Operations)  | (Operations)  | 1. Reason for Change in Operations from FY 01 to FY 02 (10%+/-).    |
|                                                                        | (Maintenance) | (Maintenance) | 2. Major Maintenance Items Budgeted in FY 02 (Threshold \$500,000). |
| ALABAMA AND MISSISSIPPI                                                |               |               |                                                                     |
| Tennessee-Tombigbee Waterway                                           | 23,547,000    | 23,800,000    |                                                                     |
|                                                                        | (11,621,000)  | (11,310,000)  | 1. None.                                                            |
|                                                                        | (11,926,000)  | (12,490,000)  | 2. Dredging.                                                        |
| FLORIDA                                                                |               |               |                                                                     |
| Apalachicola, Chattahoochee and Flint Rivers (see Alabama and Georgia) |               |               |                                                                     |
| Okeechobee Waterway                                                    | 5,811,000     | 2,520,000     |                                                                     |
|                                                                        | (2,503,000)   | (2,520,000)   | 1. None.                                                            |
|                                                                        | (3,308,000)   | (0)           | 2. None.                                                            |
| NORTH CAROLINA                                                         |               |               |                                                                     |
| Cape Fear River above Wilmington                                       | 897,000       | 486,000       |                                                                     |
|                                                                        | (513,000)     | (486,000)     | 1. None.                                                            |
|                                                                        | (384,000)     | (0)           | 2. None.                                                            |

SOUTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

1. Navigation (Cont.)

b. Locks, Dams, and Canals (Cont.)

| STATE                              | ESTIMATED                                    | OBLIGATIONS                                  |                                                                     |
|------------------------------------|----------------------------------------------|----------------------------------------------|---------------------------------------------------------------------|
|                                    | FY 2001 (\$)                                 | FY 2002 (\$)                                 | Reason for Change and Major Maintenance Items                       |
| <u>Project Name</u>                | Total                                        | Total                                        |                                                                     |
|                                    | (Operations)                                 | (Operations)                                 | 1. Reason for Change in Operations from FY 01 to FY 02 (10%+/-).    |
|                                    | (Maintenance)                                | (Maintenance)                                | 2. Major Maintenance Items Budgeted in FY 02 (Threshold \$500,000). |
| TOTAL - Locks,<br>Dams, and Canals | 59,869,000<br>(22,893,000)<br>(36,976,000)   | 50,698,000<br>(22,832,000)<br>(27,866,000)   |                                                                     |
| TOTAL - NAVIGATION                 | 207,981,000<br>(34,363,000)<br>(173,618,000) | 174,203,000<br>(34,876,000)<br>(139,327,000) |                                                                     |



SOUTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

2. Flood Control

a. Reservoirs

The program request of \$8,637,000 provides for operation and maintenance of four reservoirs and for continuing the Alabama-Coosa River Comprehensive Water Study.

| STATE                                             | <u>ESTIMATED</u>                      | <u>OBLIGATIONS</u>                      |                                                                     |
|---------------------------------------------------|---------------------------------------|-----------------------------------------|---------------------------------------------------------------------|
|                                                   | <u>FY 2001 (\$)</u>                   | <u>FY 2002 (\$)</u>                     | <u>Reason for Change and Major Maintenance Items</u>                |
| <u>Project Name</u>                               | Total                                 | Total                                   |                                                                     |
|                                                   | (Operations)                          | (Operations)                            | 1. Reason for Change in Operations from FY 01 to FY 02 (10%+/-).    |
|                                                   | (Maintenance)                         | (Maintenance)                           | 2. Major Maintenance Items Budgeted in FY 02 (Threshold \$500,000). |
| <hr/>                                             |                                       |                                         |                                                                     |
| ALABAMA                                           |                                       |                                         |                                                                     |
| Alabama-Coosa River Comprehensive Water Study, AL | 1,100,000<br>(1,100,000)<br>(0)       | 219,000<br>(219,000)<br>(0)             | 1. Decrease in environmental stewardship requirement.<br>2. None.   |
| <br>MISSISSIPPI                                   |                                       |                                         |                                                                     |
| Okatibbee Lake                                    | 955,000<br>(606,000)<br>(349,000)     | 1,584,000<br>(841,000)<br>(743,000)     | 1. Increase in water control monitoring.<br>2. None.                |
| <br>NORTH CAROLINA                                |                                       |                                         |                                                                     |
| B. Everett Jordan Dam and Lake                    | 1,500,000<br>(1,061,000)<br>(439,000) | 3,065,000<br>(1,147,000)<br>(1,918,000) | 1. None.<br>2. None.                                                |

SOUTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

2. Flood Control (Cont.)

a. Reservoirs (Cont.)

| STATE<br><br><u>Project Name</u>   | <u>ESTIMATED</u>                                              | <u>OBLIGATIONS</u>                                            | <u>Reason for Change and Major Maintenance Items</u>                                                                                    |
|------------------------------------|---------------------------------------------------------------|---------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
|                                    | <u>FY 2001 (\$)</u><br>Total<br>(Operations)<br>(Maintenance) | <u>FY 2002 (\$)</u><br>Total<br>(Operations)<br>(Maintenance) |                                                                                                                                         |
|                                    |                                                               |                                                               | 1. Reason for Change in Operations from FY 01 to FY 02 (10%+/-).<br>2. Major Maintenance Items Budgeted in FY 02 (Threshold \$500,000). |
| Falls Lake                         | 1,276,000<br>(982,000)<br>(294,000)                           | 1,516,000<br>(1,135,000)<br>(381,000)                         | 1. Increase in activities to sustain existing natural resources.<br>2. None.                                                            |
| W. Kerr Scott Dam<br>and Reservoir | 1,742,000<br>(1,191,000)<br>(551,000)                         | 2,253,000<br>(1,456,000)<br>(797,000)                         | 1. Increase in water management activities.<br>2. None.                                                                                 |

SOUTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

2. Flood Control (Cont.)

a. Reservoirs (Cont.)

Scheduled Reservoir Operations

The program request of \$130,000 provides for monitoring reservoir operations on the Alabama-Coosa River Basin, AL, and the Four River Basin, PR, including the Portugues and Bucana, PR, project.

| STATE                         | ESTIMATED                                                    | OBLIGATIONS                                                  |                                                                     |
|-------------------------------|--------------------------------------------------------------|--------------------------------------------------------------|---------------------------------------------------------------------|
|                               | FY 2001 (\$)                                                 | FY 2002 (\$)                                                 | Reason for Change and Major Maintenance Items                       |
| Project Name                  | Total                                                        | Total                                                        |                                                                     |
|                               | (Operations)                                                 | (Operations)                                                 | 1. Reason for Change in Operations from FY 01 to FY 02 (10%+/-).    |
|                               | (Maintenance)                                                | (Maintenance)                                                | 2. Major Maintenance Items Budgeted in FY 02 (Threshold \$500,000). |
| <b>ALABAMA</b>                |                                                              |                                                              |                                                                     |
| Scheduled Reservoir Operation | 120,000<br>(120,000)<br>(0)                                  | 80,000<br>(80,000)<br>(0)                                    | 1. Decrease in analysis and studies.<br>2. None.                    |
| <b>FLORIDA</b>                |                                                              |                                                              |                                                                     |
| Scheduled Reservoir Operation | 50,000<br>(50,000)<br>(0)                                    | 50,000<br>(50,000)<br>(0)                                    | 1. None.<br>2. None.                                                |
| <b>TOTAL - Reservoirs</b>     | <b>6,743,000</b><br><b>(5,110,000)</b><br><b>(1,633,000)</b> | <b>8,767,000</b><br><b>(4,928,000)</b><br><b>(3,839,000)</b> |                                                                     |

SOUTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

2. Flood Control (Cont.)

b. Channel Improvements, Inspections, and Miscellaneous Maintenance

The program request of \$11,761,000 provides for the maintenance requirements of two local flood protection projects.

| STATE               | ESTIMATED     | OBLIGATIONS   |                                                                     |
|---------------------|---------------|---------------|---------------------------------------------------------------------|
|                     | FY 2001 (\$)  | FY 2002 (\$)  | Reason for Change and Major Maintenance Items                       |
| <u>Project Name</u> | Total         | Total         |                                                                     |
|                     | (Operations)  | (Operations)  | 1. Reason for Change in Operations from FY 01 to FY 02 (10%+/-).    |
|                     | (Maintenance) | (Maintenance) | 2. Major Maintenance Items Budgeted in FY 02 (Threshold \$500,000). |
| FLORIDA             |               |               |                                                                     |
| Central and         | 10,558,000    | 11,591,000    |                                                                     |
| Southern Florida    | (6,563,000)   | (6,682,000)   | 1. None.                                                            |
|                     | (3,995,000)   | (4,909,000)   | 2. None.                                                            |
| MISSISSIPPI         |               |               |                                                                     |
| East Fork,          | 150,000       | 170,000       |                                                                     |
| Tombigbee River     | (0)           | (0)           | 1. None.                                                            |
|                     | (150,000)     | (170,000)     | 2. None.                                                            |

SOUTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

2. Flood Control (Cont.)

b. Channel Improvements, Inspections, and Miscellaneous Maintenance (Cont.)

Inspection of Completed Works

The \$289,000 requested in FY 2002 supports inspection at 110 flood control projects constructed by the Corps and operated and maintained by non-Federal interests.

| STATE                 | ESTIMATED     | OBLIGATIONS   |                                                                     |
|-----------------------|---------------|---------------|---------------------------------------------------------------------|
|                       | FY 2001 (\$)  | FY 2002 (\$)  | Reason for Change and Major Maintenance Items                       |
| Project Name          | Total         | Total         |                                                                     |
|                       | (Operations)  | (Operations)  | 1. Reason for Change in Operations from FY 01 to FY 02 (10%+/-).    |
|                       | (Maintenance) | (Maintenance) | 2. Major Maintenance Items Budgeted in FY 02 (Threshold \$500,000). |
| Alabama               | 50,000        | 100,000       |                                                                     |
| Florida               | 100,000       | 100,000       |                                                                     |
| Georgia               | 100,000       | 41,000        |                                                                     |
| North Carolina        | 22,000        | 22,000        |                                                                     |
| South Carolina        | 26,000        | 26,000        |                                                                     |
| Inspection of         | 298,000       | 289,000       |                                                                     |
| Completed Works       | (298,000)     | (289,000)     | 1. None.                                                            |
|                       | (0)           | (0)           | 2. None.                                                            |
| TOTAL - Channel       | 11,006,000    | 12,050,000    |                                                                     |
| Improvements,         | (6,861,000)   | (6,971,000)   |                                                                     |
| Inspections, &        | (4,145,000)   | (5,079,000)   |                                                                     |
| Misc Maintenance      |               |               |                                                                     |
| TOTAL - FLOOD CONTROL | 17,749,000    | 20,817,000    |                                                                     |
|                       | (11,971,000)  | (11,899,000)  |                                                                     |
|                       | (5,778,000)   | (8,918,000)   |                                                                     |

SOUTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

3. Multiple Purpose Power

The program request of \$86,198,000 provides for the operation requirements of 13 multiple purpose projects. Requirements include: operation and ordinary maintenance of project facilities; labor, supplies, materials, and parts for day-to-day functioning; and periodic maintenance, repairs and replacements. The requested amount also includes application of special recreation use fees for recreation areas.

| STATE                                                                   | ESTIMATED                               | OBLIGATIONS                             |                                                                                                                                         |
|-------------------------------------------------------------------------|-----------------------------------------|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
|                                                                         | FY 2001 (\$)                            | FY 2002 (\$)                            | Reason for Change and Major Maintenance Items                                                                                           |
| Project Name                                                            | Total<br>(Operations)<br>(Maintenance)  | Total<br>(Operations)<br>(Maintenance)  |                                                                                                                                         |
|                                                                         |                                         |                                         | 1. Reason for Change in Operations from FY 01 to FY 02 (10%+/-).<br>2. Major Maintenance Items Budgeted in FY 02 (Threshold \$500,000). |
| ALABAMA                                                                 |                                         |                                         |                                                                                                                                         |
| Millers Ferry Lock<br>and Dam - William<br>"Bill" Dannelly<br>Reservoir | 4,999,000<br>(2,215,000)<br>(2,784,000) | 4,900,000<br>(2,399,000)<br>(2,501,000) | 1. None.<br>2. None.                                                                                                                    |
| Robert F. Henry<br>Lock and Dam - R.E.<br>"Bob" Woodruff Lake           | 4,962,000<br>(2,143,000)<br>(2,819,000) | 5,000,000<br>(2,273,000)<br>(2,727,000) | 1. None.<br>2. None.                                                                                                                    |
| Walter F. George<br>Lock and Dam                                        | 7,373,000<br>(3,032,000)<br>(4,341,000) | 6,565,000<br>(2,864,000)<br>(3,701,000) | 1. None.<br>2. None.                                                                                                                    |

SOUTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

3. Multiple Purpose Power (Cont.)

| STATE                           | ESTIMATED     | OBLIGATIONS   |                                                                     |
|---------------------------------|---------------|---------------|---------------------------------------------------------------------|
|                                 | FY 2001 (\$)  | FY 2002 (\$)  | Reason for Change and Major Maintenance Items                       |
| Project Name                    | Total         | Total         |                                                                     |
|                                 | (Operations)  | (Operations)  | 1. Reason for Change in Operations from FY 01 to FY 02 (10%+/-).    |
|                                 | (Maintenance) | (Maintenance) | 2. Major Maintenance Items Budgeted in FY 02 (Threshold \$500,000). |
| <hr/>                           |               |               |                                                                     |
| FLORIDA                         |               |               |                                                                     |
| Jim Woodruff Lock and Dam       | 5,855,000     | 5,719,000     |                                                                     |
|                                 | (3,178,000)   | (3,254,000)   | 1. None.                                                            |
|                                 | (2,677,000)   | (2,465,000)   | 2. None.                                                            |
| <br>GEORGIA                     |               |               |                                                                     |
| Allatoona Lake                  | 4,520,000     | 5,427,000     |                                                                     |
|                                 | (1,689,000)   | (2,414,000)   | 1. Increase in environmental requirements.                          |
|                                 | (2,831,000)   | (3,013,000)   | 2. None.                                                            |
| Buford Dam - Lake Sidney Lanier | 7,275,000     | 7,525,000     |                                                                     |
|                                 | (3,527,000)   | (3,455,000)   | 1. None.                                                            |
|                                 | (3,748,000)   | (4,070,000)   | 2. None.                                                            |
| Carters Lake                    | 7,489,000     | 7,600,000     |                                                                     |
|                                 | (2,368,000)   | (2,451,000)   | 1. None.                                                            |
|                                 | (5,121,000)   | (5,149,000)   | 2. Repair of units.                                                 |
| Hartwell Lake                   | 11,875,000    | 11,876,000    |                                                                     |
|                                 | (5,442,000)   | (5,678,000)   | 1. None.                                                            |
|                                 | (6,433,000)   | (6,198,000)   | 2. None.                                                            |

SOUTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

3. Multiple Purpose Power (Cont.)

| STATE                                         | ESTIMATED                                | OBLIGATIONS                              |                                                                     |
|-----------------------------------------------|------------------------------------------|------------------------------------------|---------------------------------------------------------------------|
|                                               | FY 2001 (\$)                             | FY 2002 (\$)                             | Reason for Change and Major Maintenance Items                       |
| Project Name                                  | Total                                    | Total                                    |                                                                     |
|                                               | (Operations)                             | (Operations)                             | 1. Reason for Change in Operations from FY 01 to FY 02 (10%+/-).    |
|                                               | (Maintenance)                            | (Maintenance)                            | 2. Major Maintenance Items Budgeted in FY 02 (Threshold \$500,000). |
| J. Strom Thurmond Lake                        | 10,585,000<br>(5,857,000)<br>(4,728,000) | 10,325,000<br>(5,992,000)<br>(4,333,000) | 1. None.<br>2. None.                                                |
| Richard B. Russell Dam and Lake               | 6,190,000<br>(3,381,000)<br>(2,809,000)  | 6,564,000<br>(3,966,000)<br>(2,598,000)  | 1. Increase in environmental studies.<br>2. None.                   |
| Walter F. George L & D (see Alabama)          |                                          |                                          |                                                                     |
| West Point Lake                               | 3,977,000<br>(1,977,000)<br>(2,000,000)  | 4,865,000<br>(1,978,000)<br>(2,887,000)  | 1. None.<br>2. None.                                                |
| NORTH CAROLINA                                |                                          |                                          |                                                                     |
| John H. Kerr Dam and Reservoir (see Virginia) |                                          |                                          |                                                                     |
| SOUTH CAROLINA                                |                                          |                                          |                                                                     |
| Hartwell Lake (see Georgia)                   |                                          |                                          |                                                                     |
| J. Strom Thurmond Lake (see Georgia)          |                                          |                                          |                                                                     |
| Richard B. Russell (see Georgia)              |                                          |                                          |                                                                     |



SOUTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

3. Multiple Purpose Power (Cont.)

| STATE               | ESTIMATED     | OBLIGATIONS   |                                                                     |
|---------------------|---------------|---------------|---------------------------------------------------------------------|
|                     | FY 2001 (\$)  | FY 2002 (\$)  | Reason for Change and Major Maintenance Items                       |
| <u>Project Name</u> | Total         | Total         |                                                                     |
|                     | (Operations)  | (Operations)  | 1. Reason for Change in Operations from FY 01 to FY 02 (10%+/-).    |
|                     | (Maintenance) | (Maintenance) | 2. Major Maintenance Items Budgeted in FY 02 (Threshold \$500,000). |
| <hr/>               |               |               |                                                                     |
| VIRGINIA            |               |               |                                                                     |
| John H. Kerr Dam    | 8,041,000     | 10,013,000    |                                                                     |
| and Reservoir       | (5,465,000)   | (5,777,000)   | 1. None.                                                            |
|                     | (2,576,000)   | (4,236,000)   | 2. None.                                                            |
| Philpott Lake       | 3,060,000     | 3,865,000     |                                                                     |
|                     | (1,644,000)   | (1,689,000)   | 1. None.                                                            |
|                     | (1,416,000)   | (2,176,000)   | 2. None.                                                            |
| TOTAL - Multiple    | 86,201,000    | 90,244,000    |                                                                     |
| Purpose Projects    | (41,918,000)  | (44,190,000)  |                                                                     |
|                     | (44,283,000)  | (46,054,000)  |                                                                     |

SOUTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

4. Protection of Navigation

The program request of \$3,634,000 provides for accomplishing the work essential to the eradication of aquatic plant growth for navigable waters in Florida.

| STATE<br><br><u>Project Name</u> | <u>ESTIMATED</u>    | <u>OBLIGATIONS</u>  | <u>Reason for Change and Major Maintenance Items</u>                |
|----------------------------------|---------------------|---------------------|---------------------------------------------------------------------|
|                                  | <u>FY 2001 (\$)</u> | <u>FY 2002 (\$)</u> |                                                                     |
|                                  | Total               | Total               |                                                                     |
|                                  | (Operations)        | (Operations)        | 1. Reason for Change in Operations from FY 01 to FY 02 (10%+/-).    |
|                                  | (Maintenance)       | (Maintenance)       | 2. Major Maintenance Items Budgeted in FY 02 (Threshold \$500,000). |
| Removal of Aquatic Growth        | 3,340,000           | 3,634,000           |                                                                     |
|                                  | (0)                 | (0)                 | 1. None.                                                            |
|                                  | (3,340,000)         | (3,634,000)         | 2. Removal of aquatic growth.                                       |

SOUTH ATLANTIC DIVISION  
JUSTIFICATION OF ESTIMATE

APPROPRIATION TITLE: Operation and Maintenance, General, FY 2002

4. Protection of Navigation

Project Condition Surveys

The program request of \$1,059,000 provides for project condition surveys for navigation projects for which maintenance is not scheduled in the budget year.

| STATE                                 | ESTIMATED                                    | OBLIGATIONS                                  |                                                                     |
|---------------------------------------|----------------------------------------------|----------------------------------------------|---------------------------------------------------------------------|
|                                       | FY 2001 (\$)                                 | FY 2002 (\$)                                 | Reason for Change and Major Maintenance Items                       |
| Project Name                          | Total                                        | Total                                        |                                                                     |
|                                       | (Operations)                                 | (Operations)                                 | 1. Reason for Change in Operations from FY 01 to FY 02 (10%+/-).    |
|                                       | (Maintenance)                                | (Maintenance)                                | 2. Major Maintenance Items Budgeted in FY 02 (Threshold \$500,000). |
| Alabama                               | 350,000                                      | 350,000                                      |                                                                     |
| Florida                               | 600,000                                      | 600,000                                      |                                                                     |
| North Carolina                        | 64,000                                       | 64,000                                       |                                                                     |
| South Carolina                        | 60,000                                       | 45,000                                       |                                                                     |
| Project Condition Surveys             | 1,074,000<br>(1,074,000)<br>(0)              | 1,059,000<br>(1,059,000)<br>(0)              | 1. None.<br>2. None.                                                |
| TOTAL - Protection of Navigation      | 4,414,000<br>(1,074,000)<br>(3,340,000)      | 4,693,000<br>(1,059,000)<br>(3,634,000)      |                                                                     |
| GRAND TOTAL - SOUTH ATLANTIC DIVISION | 316,345,000<br>(89,326,000)<br>(227,019,000) | 289,957,000<br>(92,024,000)<br>(197,933,000) |                                                                     |